

PRIORITY AREAS FOR ACTION: UNDERSTANDING MENTAL HEALTH DATA IN INDIA

Acknowledgements

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Executive Summary

Sound mental health and well-being are essential for individuals to lead a fulfilling life. While conversations around mental health are now being mainstreamed, with the rising prevalence of mental health issues, following the COVID-19 pandemic and increasing involvement of governments as well as civil society organisations, there is still a large divide that is yet to be addressed.

Prevalence of mental illness in India

Over 13% of the Indian population suffers from some form of mental disorder. Substance abuse disorders, and alcohol dependence in particular, form a major chunk of these issues. Disparities in the mental health burden exist along gender and regional lines. More women than men are found to be prone to anxiety, neurosis and stress. Rural areas account for nearly 68% of the population suffering from mental disability. In addition, mental morbidity is the highest among vulnerable and marginalised populations. The pandemic also exacerbated these issues, with a stark 18% increase being observed in suicide rates among children and adolescents in 2020. Despite the situation being dire, a treatment-seeking attitude is lacking among the population, and 70-90% of all people who need mental health care are not receiving it.

This highlights a large-scale systemic problem in India. This perspective addresses the problem using a **three-lever framework** to analyse the data on the landscape of mental health in India today, and recommended steps for action.

1. Service Utilisation

Between 2017 and 2020, there has been an increase in the utilisation of outpatient mental health services. Following a decline during the pandemic and resulting lockdown, the number of outpatients seeking mental health care increased, peaking in March 2021. While the numbers are yet to recover to post-pandemic levels, there has been an upward trend in urban institutions. Service utilisation calls for strengthening, especially in rural areas. This can be achieved by:

- Employing innovative models to develop solutions that enable accessibility of mental health services.
- Promoting mental health in the community through information, education and communication, to ensure mental health literacy and increase mental health-seeking behaviour.
- Ensuring availability of mental health services by embedding mental health services within existing essential services and primary healthcare.
- Ensuring inclusion of mental health within universal health coverage and insurance schemes to ensure affordability.

2. Infrastructure

Existing infrastructure is insufficient and ill-equipped to address mental health concerns for the population. There is a lack of trained professionals at all tiers of the healthcare delivery mechanism. In order to ensure prevention, promotion, screening, and early detection at a preliminary level, it is important to build a robust primary care system. Another crucial element of this system would be a rigorously trained cadre of frontline workers, including social workers and non-clinical staff, who are often the first point of contact for mental health patients in the community. The inclusion of mental health training as an essential component in the curriculum for all health workers is also recommended along with maintenance of a database of trained providers.

3. Policy

Policy initiatives should ensure that all segments of the population, especially the marginalised and vulnerable, have access to affordable and quality mental healthcare services. There are several nodal agencies which play an important role in achieving this. These agencies should prioritise:

- · Holistically strengthening systems for mental health.
- Increasing overall budget allocation for mental health by the government, and in particular to the National Mental Health Programme (NMHP) and District Mental Health Programmes (DMHP) to enable effective implementation.
- Establishing systems for accountability of states and ensuring governance of state-level implementation of all provisions of the National Mental Health Policy 2014 and Mental Healthcare Act 2017.
- Establish governance mechanisms to ensure proper utilisation of allocated funds by the NMHP and DMHP.

In addition to specific areas of action across the three levers, there is a need for broader systemic action. This can be done by creating resilient systems with adequate infrastructure, building a cadre of trained mental health workforce to bridge the treatment gap and integrating mental health into other programmes to ensure sustainable interventions, especially for issues with high prevalence like suicides and substance abuse which require urgent action. Comprehensive treatment approaches to understand and address underlying determinants of mental health will be essential to enable and sustain positive outcomes. Workplaces across sectors should take responsibility to support employees with mental well-being.

Background and Context

Mental health and well-being are essential to an individual's capacity to lead a fulfilling life. Presently, India faces an acute mental health crisis, where one in five adults tends to suffer from depression at some point in their lifetime (World Economic Forum 2018). Further, the pandemic exacerbated the crisis wherein India lost more people to suicide than to COVID-19 in 2020 (NCRB 2020). The lack of awareness around mental health, and the resulting social stigma is a major reason for nearly 70% of Indians with mental illnesses being reluctant to seek help (Birla 2019).

Following its independence from colonial rule, India was the first country to seek changes in the field of mental health (Meltzer n.d.). The Mental Health Act of 1987 established minimum treatment criteria for mental health facilities, and for the first time, prioritised care and treatment above imprisonment. This strategy favoured the development of primary community-based health systems that are integrated with primary care. It also sought the abolition of the stigmatisation of patients with mental illnesses (Math et al. 2011).

In India, government efforts have showcased an intent to focus on mental health and ensure that all segments of the population have access to affordable and quality mental healthcare services. DMHP was introduced as the key lever of implementation of the NMHP across states (NMHP 2014).

In addition, the National Mental Health Policy 2014 was introduced by the government adopting an integrated, participatory, rights and evidence-based approach to Mental Health (Ministry of Health & Family Welfare 2014). In 2017, India passed the Mental Healthcare Act, recognising the massive burden of mental illness, inadequate infrastructure, and sociocultural barriers (Mishra & Galhotra 2018). India's Mental Health Care Act ensures that patients' rights and dignity are protected while undergoing treatment and rehabilitation. This includes access to psychotropic medication, insurance coverage for mental disease, and money for private consultation if district-level mental health service is not available. (Ministry of Law and Justice 2017).

India still has many issues with its mental health policy and the delivery of mental health care. Despite policy level recognition of mental health as a priority, implementation has been poor and largely fragmented. Current legislation and policy implementation have a long way to go in comprehensively recognising and responding to the socioeconomic realities that underpin millions of people's mental health problems. This political intent via policy is not backed by adequate budget allocations, leading to systemic challenges in effective implementation. Addressing challenges in infrastructure, service delivery and access are the need of the hour.

Recognising the need for good quality, scientific and reliable information, and to strengthen mental health policies and programmes at national and state levels, the Ministry of Health

and Family Welfare (MoHFW) commissioned the National Institute of Mental Health and Neuro Sciences (NIMHANS) to undertake a National Mental Health Survey (NMHS) in 2015-16. **This was the first comprehensive survey** on the prevalence of mental health and the readiness of the infrastructure in India to provide care.

- **Point prevalence** of mental illness is defined as the proportion of persons with a particular mental illness on a particular date (CDC n.d.).
- Lifetime prevalence of mental illness is the proportion of a population who, at some point in life, has ever had a mental illness (National Institute of Mental Health n.d.).

In the National Mental Health Survey, 2015-16, **current (point) prevalence** is reported for all diagnostic groups (ICD categories F10-19, F40-48) which include mental and behavioural disorders due to psychoactive substance abuse (excluding F17 Tobacco), tobacco use disorder, neurotic, stress- related and somatoform disorders). Both **current and lifetime prevalence** (ever in the life of an individual in the past) is reported for select conditions under F20-29 and F30-39 which include schizophrenia and other psychotic disorders, mood [affective] disorders, and panic disorders (NMHS 2015-16). Figures 1 and 4 are based on data from the NMHS 2015-16.

Data is critical to drive evidence-based action. **But data on mental health in India is a white space**. Given the pandemic and global trends in the rise of mental health issues, the data from the NMHS 2015-16 does not provide an up-to-date view of the mental health landscape in India. However, it is indicative of a high prevalence, even before the pandemic, calling for greater prioritisation today.

Future mental health legislation in India must take into account socioeconomic issues as well as the discrimination that marginalised groups face. These will need to address such elements through suitable policies, designed in collaboration with those who would be most affected. While ensuring that reliable data and research on mental health is a prioritised action to enable effective impact, this perspective analyses the existing mental health data in India to make evidence-based recommendations for action, across systemic pillars.

Prevalence of Mental Health in India

More than 13% of the population suffers from some sort of mental disorder.

As of 2019, 13.73% of India's population suffered from variations of mental disorders (Datani et al. 2021). The COVID-19 pandemic has significantly worsened mental health outcomes for people belonging to vulnerable and marginalised sections. Despite the government recognising the severity of mental illness with some policy prioritisation, there continues to be a high treatment gap across all disorders (Sagar et al. 2019). With a significant increase in the prevalence of psychiatric and psychological problems due to the pandemic (Majumdar 2022), the burden of mental health issues is rising.

The treatment gap is as high as 70-90%, indicating the skewed gap in supply and demand.

Treatment gap for mental disorders refers to the difference that exists between the number of people who need care and those who receive care. As per the NMHS 2015-16, more than 70% (70-90%) of people who need mental health care are not receiving it (NMHS 2016, pp. 5). The highest treatment gap can be observed in substance use disorders, such as tobacco, alcohol, any other substance use-related disorder, followed by depressive disorders and then other mental illnesses.

Irrespective of the prevalence rates of these disorders, the treatment gap is very high across all these illnesses. Disorders related to substance use need extra attention, given the extremely high prevalence and very high treatment gap (NMHS 2016).

However, irrespective of prevalence, the treatment gap is very high for all the states. A high treatment gap in India points to major barriers to mental health service utilisation. These include scarcity of resources, unequal distribution, inefficient use, non-medical explanations, and a lack of awareness, accessibility, and availability of healthcare services (Kaur & Pathak 2017). The causes and consequences of mental health problems are highly complex and need to be addressed across the system rather, than in isolation.

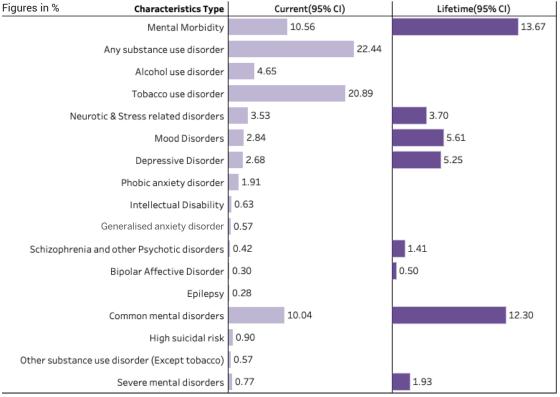


Figure 1: Prevalence of mental illness in India (2015-16)

(NMHS 2015-16)

A confidence interval is a range of values that describes the uncertainty surrounding an estimate (United States Census Bureau n.d.). The 95% confidence interval is a range of values that one can be 95% confident contains the true mean of the population.

India has a very high burden of depressive and anxiety disorders.

In India, the share of the population with depression and anxiety is 3.75% and 3.04% respectively (Datani et al. 2021). India is the most depressed country in the world, according to WHO. The state-level data points towards an urgent need to prioritise action in certain states. Common mental disorders is high in the states of Madhya Pradesh, Manipur and Punjab, at less than 13%, closely followed by West Bengal, Tamil Nadu, and Chhattisgarh, with less than 11% (NMHS 2016, pp. 120).

Tamil Nadu and Madhya Pradesh have the largest treatment gap for common mental disorders, at less than 91%. However, more than 90% of the population who are in need of treatment for depressive disorder in the states of Assam, Tamil Nadu, West Bengal and Rajasthan are not receiving it (NMHS 2016).

More than eight crore Indians suffer from some form of a serious mental disorder.

India has the most number of cases of anxiety, schizophrenia and bipolar disorder in the world. At least 6.5% of the Indian population suffers from some form of serious mental disorder and the treatment gap for severe mental disorders is at 73.6% (India Today 2018). The treatment gap for severe mental disorders is 73.6%. Prevalence for severe mental disorders is highest in West Bengal (2.3%) along with the third-highest gap in the treatment (NMHS 2016).

Substance use disorders form the highest burden of mental illness in India.

Substance abuse is a critical challenge in the mental health landscape of India. The overall mental illness due to any substance use is highest across all age groups, with tobacco use disorder being the most popular at 21%. According to the National Survey on Extent and Pattern of Substance Use in India, 14.6% of the population aged 10-75 years consume alcohol and 5.2% are alcohol dependent (India Today 2018). Nearly 0.66% of the population suffers from problems caused by cannabis use, while nearly 0.55% of opioid users require treatment interventions (NISD n.d.). In light of the increasing abuse of these various substances, addressing this is critical to making an impact on related mental health disorders.

Mental morbidity is highest among vulnerable and marginalised populations.

Mental morbidity refers to "the incidence of both physical and psychological deterioration due to a mental or psychological condition" (Hilaris Publisher n.d.). **An estimated 15 crore individuals suffer from one or the other mental morbidity in India** (NMHS 2016). Prevalence of mental morbidity is highest among individuals with low levels of education, the unemployed, widowed, divorced or separated individuals, and households with a low income (Gautham et al. 2020). Addressing mental morbidity will require a holistic approach that includes sociocultural and economic determinants of mental illness, including unemployment, lack of sustainable livelihoods, low income and poor education.

India witnessed a 13% increase in suicide rates in 2020.

Since 2010, there was an average of 1.35 lakh suicides in India every year and in 2020 this average increased to 1.53 lakh (NCRB 2020). The suicide rate, which is the number of deaths

by suicide per lakh population, rose from 10 in 2019 to 11.3 in 2020, post the pandemic. This means that for every 1 lakh, India lost one more person in 2020 than in 2019 (NCRB 2020). Social factors contributing to suicides include family problems, marriage disputes, drug addiction, increasing debt, failure in examination, property dispute, unemployment, work conditions as well as love affairs (NCRB 2020).

The age group of 18-45 years is the most vulnerable to suicides, contributing to almost two-thirds of all suicides in 2020 (NCRB 2020). At least 50 million Indian children were already suffering from mental health issues, and 80-90% of them did not seek help prepandemic (Hossain & Purohit 2019; UNICEF n.d.). Post the COVID-19 pandemic in 2020, India saw an 18% rise in suicide among children and adolescents (NCRB 2020; The Economic Times 2021). Long-term isolation during the pandemic compounded the rates of anxiety, stress and depression among children and adolescents, likely contributing to high suicide rates in this age group. Other factors such as disruption in their education, lifestyle, sleep as well as access to outdoor play and mental health support, also contributed to their high rates of mental health issues (Save the Children 2021). This highlights the need for targeted programmes to support children who are transitioning back to in-class learning, as well as programmes that provide preventive support and early intervention to reduce the risk of mental illness.

Mental health issues in India also vary with gender and regional disparities.

The gender disparity in the prevalence of mental health is prominent. For women overall mood disorders, depression at 2.97% and generalised anxiety at 0.76% are higher than in men (NMHS 2016). The prevalence of depression affects 10-25% of women, which is 1.8 times more when compared to that amongst men, indicative of the impact that sociocultural barriers such as domestic violence, patriarchy, and gender discrimination can create when it comes to mental health (Moorkath et al. 2019; Ram & Mathew 2021).

The number of suicides amongst men has more than doubled than that of women. In 2020, India lost more than 1 lakh men and more than 44,000 women to suicide (NCRB 2020). While the number of suicides among women has seen a marginal decrease in the last ten years, the same has been rising among men. Although the share of women in the total number of suicides is less than men, certain states have shown concerning numbers. For example, more than 40% of suicides in Jammu & Kashmir, Bihar and West Bengal involve women (NCRB 2020).

Regional disparities in the mental health burden are also evident. Prevalence of mental morbidity and substance use disorders are high in all types of residents across rural, urban and urban metros. However, for substance use-related disorders specifically, it is highest in rural areas, affecting 24% of the population. On the other hand, urban-metro residents have the highest prevalence of mental morbidity. Urban metro residents also have the highest majority of stress-related, mood-related, anxiety and depressive disorders – anywhere between 2-3 times higher than their rural and urban non-metro counterparts (NMHS 2016).

UNDERSTANDING MENTAL HEALTH DATA IN INDIA

A national study suggests that economic impact, work, family and social life contribute towards stress and anxiety (NMHS 2016, p. viii). Increased use and exposure to social media further exacerbate mental health, especially among young adults and adolescents, leading to an increased risk of eating disorders, cyberbullying and social exclusion (Schønning et al. 2020). Furthermore, the impact of growing urbanisation, with overcrowding and a polluted environment, high levels of violence, and reduced social support, has been shown to increase mental morbidity among urban-metro residents (Pavithra et al. 2022; Srivastva 2009).

Irrespective of the overall health infrastructure, mental health is still not a priority across states and the prevalence of issues is high. Maharashtra, Tamil Nadu, Madhya Pradesh, West Bengal and Karnataka have the highest share of suicides in India. A key point of concern is that the number of suicides in these five states constitutes approximately half of India's total suicides (NCRB 2020). The lockdown measures due to the pandemic in 2020 resulted in a loss of income, restricted mobility, drug addiction, increased alcohol consumption and problems within families, which could have contributed to the rise in suicides in India (Arya et al. 2022). Furthermore, the increase in farmer suicides in Maharashtra could have contributed to the high share of suicides in the state (Taluvale 2020). Sikkim, Chattisgarh, Kerala, Tamil Nadu and Telangana saw more than 20 suicides per lakh of the population (NCRB 2020). While southern states like Kerala, Tamil Nadu and Telangana are known to have better health infrastructure compared to other states, it does not seem to have a bearing on the mental health burden and readiness to address mental health issues.

Among substance use disorders, tobacco use disorders form the highest share and prevalence in almost all surveyed states. Rajasthan has the highest prevalence rate of substance use disorders, followed by Madhya Pradesh and Chhattisgarh. Other substance use disorders, besides alcohol, are highest in Punjab at 2.5%, and Chhattisgarh at 1.3%, while the burden of alcohol use disorder is highest in Madhya Pradesh at 10%. In the state of Uttar Pradesh, almost all the people who need care for alcohol use disorder are not receiving any treatment. In most of the surveyed states, more than 80% of the population who need treatment for alcohol use disorder are not receiving it (NMHS 2016).

Situation Landscape for Mental Health

A three-lever framework has been used to analyse the data on the landscape of mental health in India today.

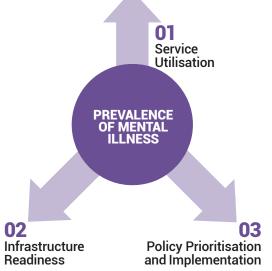
Our approach to structure data on the landscape of mental health, places the prevalence and burden of mental illness at the centre, informing the needs and priority for action. Based on the data, this perspective identifies three key levers for action:

• Infrastructure readiness: Focusing on infrastructure and the need for strengthening the

system overall, to enable a strong supply of mental health services, with adequate facilities and the availability of a trained cadre of health care providers.

- Policy prioritisation and implementation: Focusing on the creation of an enabling environment for mental health with strong systems, governance, policy prioritisation and effective implementation of policy on ground.
- Service utilisation: Focusing on ensuring access to services at the last mile, with affordable and quality care, which is easily accessible to the population, especially marginalised and underserved groups.

Figure 2: Situational landscape levers, with the challenge of mental illness at the core, informing priorities for action



This framework will provide the key to link

recommendations across the three pillars for action. In addition to these, preventive and promotional interventions to ensure mental health literacy among the population, and continuous monitoring of the quality of care will be essential to enable impact.

(Sattva 2022)



1. Service Utilisation

The Health Management Information System (HMIS) was put in place by the MoHFW to monitor the performance and quality of health services provided under the National Health Mission and other health programmes. The HMIS provides periodic reports on the status of the health services performance, human resources and infrastructure service facilities available.

Since 2017, apart from other health services, HMIS has been monitoring and tracking the number of outpatients availing health services for mental illness at both public and private facilities (which are working in collaboration with the government to provide services via an MoU and other partnership models) in urban and rural areas (HMIS 2022). The following recommendations in this section are derived from an analysis of HMIS data between 2017 and 2020.

RECOMMENDATIONS FOR ACTION

Develop solutions enabling remote service utilisation of mental health services through innovative and telephonic or technology-based models (HMIS 2022).

COVID-19 drastically impacted the use of outpatient services, a decline of 36.5% (~22.3 lakhs), indicating barriers in service utilisation as a key challenge, especially in rural

India. This highlights a critical and urgent need for solutions to address access barriers and enable remote service utilisation of mental health services through innovative and telephonic or technology-based models.

Ensure availability of mental health services by embedding mental health services within existing essential services and primary healthcare.

Outpatient service usage pre-pandemic was 60-80% in rural areas and 20% in urban areas. Following the onset of the pandemic, the usage was 20% for the rural population and increased to 50% for the urban population, reflecting the skewed demand and supply gap in the rural areas (HMIS 2022). Despite the varied recovery in rural and urban regions, the lack of availability of mental health services is a key challenge in ensuring higher utilisation of outpatient services.

Ensure inclusion of mental health as part of universal health coverage and insurance schemes to ensure affordability, given high out-of-pocket expenditure acting as a barrier to access.

The median amount spent for care and treatment varied between disorders – treatment for alcohol use disorder required ₹2,250, schizophrenia and other psychotic disorders ₹1,000, depressive disorder ₹1,500, neurosis ₹1,500, and epilepsy ₹1,500 (NMHS 2016). This high out-of-pocket expenditure serves as a barrier to accessing care, especially for marginalised groups whose livelihood was impacted due to COVID.

Promoting mental health through Information, Education and Communication (IEC) channels to reduce stigma, drive awareness and increase mental-health seeking behaviour within the community.

Since 2017, the use of outpatient services for mental health has been on the rise, seeing anywhere between an 18-25% rise each year (HMIS 2022). This is indicative of a trend in rising mental health issues, and a possible rise in awareness among the population in light of a growing global dialogue on mental health.

Rural facilities saw a higher utilisation of outpatient services, pre-COVID.

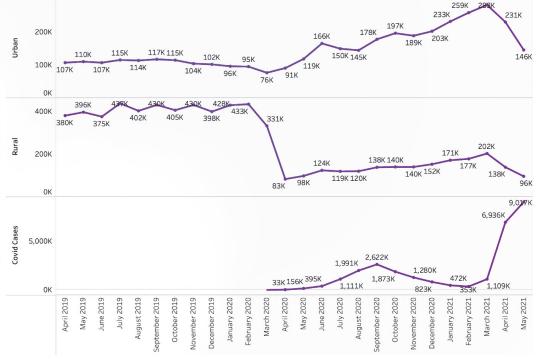
The number of people availing outpatient health services for mental illness has been increasing steadily from 2017 until the financial year FY 2019-20. In FY 2019-20, about 61 lakh people availed the outpatient health services for mental illness, averaging about 5 lakh outpatients every month.

Note: While this data on health facilities covers largely public facilities, these numbers also include select private facilities partnering with the government to provide services.

Of the total number of outpatient services availed at public health facilities between 2017 to 2020, 60-80% were availed in rural areas. There has been a major change in the share of outpatients availing services for mental illness at the urban facilities. Until 2019-20, approximately only 20% of the total outpatients who availed of services for mental illness were at urban facilities.

Tamil Nadu, West Bengal, Rajasthan and Karnataka witnessed the highest number of outpatients availing health services for mental illness between 2017 and 2019.





(Health Management Information System 2019-22)

COVID-19 adversely impacted the use of outpatient services for mental illness. Following the onset of the pandemic, FY 2020-21 saw a 36% fall in the use of outpatient services. The number of outpatients availing services for mental illness saw the highest growth rate of 33.78% in June 2020, once the country was out of the first lockdown. The volume peaked in March 2021 to 485,000 right before the second wave of COVID. During both the first and second waves, the number of outpatient visits fell drastically, likely due to associated movement restrictions. However, soon after the relaxation of lockdown restrictions, there was significant growth in the number of people availing outpatient services.

All states were impacted by COVID and saw a fall in outpatient services. All large states saw a fall in number in FY 2020-21 due to COVID, despite witnessing an upward trend in the number of outpatients availing health services for mental illness from FY 2017-18. Odisha

was the only exception, where the number increased by approximately 7,000 in 2020-21 from the previous year.

In FY 2020-21, around 38.74 lakh people in India availed outpatient services for mental illness. In Tamil Nadu it was 18%, followed by West Bengal at 11%, forming the largest share of these services. Trends in outpatient services could be linked to a combination of factors, a few key ones being:

- Lack of affordability of services
- Limited access
- · Lack of availability of services
- Limited awareness

Nearly 43% of the outpatients availing services for mental illness were in rural health facilities. In Meghalaya, Bihar, Odisha and Haryana, more than 95% of all outpatient services availed for mental illness were in rural health facilities.

Certain states saw a higher rate of outpatient services. Tamil Nadu, Kerala, Mizoram and the union territories of Ladakh and Andaman and Nicobar Islands had a higher share of people per lakh of the population, 850 or more, availing this service. In Bihar, only 15 people per lakh of the population availed outpatient services, indicative of poor health infrastructure for mental health in the state.

Outpatient services in urban facilities resumed more quickly than in rural facilities, post the COVID-19 waves.

Until March 2020, rural facilities had an average of four lakh outpatients availing services for mental illness, and a very small share of outpatients were seen in urban facilities. With the onset of COVID, although the overall number of people availing outpatient services saw a sharp fall, the number of people using outpatient services at urban facilities rose. The numbers drastically declined in the rural facilities and even by May 2021, did not see a recovery to pre-pandemic levels of utilisation.

The steep decline in people availing outpatient services in rural facilities post-COVID could be attributed to supply-side challenges, such as having to cover long distances to access care and lack of availability of mental health services due to the prioritisation of COVID care.

Between 2020-21, the recovery of the use of outpatient services to the earlier numbers was better in the urban areas than rural ones. This might be attributed to higher resilience of the health systems in resuming mental health services, as well as better or easier access to health services in urban India. This rise in outpatient services in urban areas could be indicative of better infrastructure readiness and availability of mental health services. It could also be indicative of a rise in the prevalence of mental health issues during the pandemic due to a higher number of deaths, stricter lockdown measures, isolation and rising stress and anxiety.



2. Infrastructure Readiness

Infrastructure, in terms of availability and quality of facilities and service providers, is a critical determinant of the readiness of a system. For mental health, this includes the availability of facilities providing both general and specialised mental health services. A trained workforce includes specialists such as psychiatrists and psychologists, as well as non-medical health workers trained in the provision of basic mental health services, including preventive and promotive activities, screening and basic counselling for common mental health issues. In India, the infrastructure is inadequate to cater to the high burden of mental health issues and requires immediate action.

Data limitations: This section uses data from the National Mental Health Survey 2015-16 due to a lack of other recent national data sources on the infrastructure for mental health. Literature and views of practitioners suggest that these numbers are indicative of the current infrastructure for mental health, which is inadequate, skewed and not equipped to cater to the high need.

RECOMMENDATIONS FOR ACTION

Training non-specialised health cadres as the predominant workforce at a primary-care level, to enable task sharing and efficiencies in a mix of healthcare professionals.

There is a high emphasis on clinical and pharmacological treatment, personnel and infrastructure, with limited focus on the need for a cadre of health workers acting as primary touch points for communities via prevention and promotion. The understanding of the supply gap is skewed, whereby the emphasis is more on psychiatrists and psychologists than on non-specialised doctors and non-medical social workers. A stepped care model focused on the integration of mental health into primary healthcare, requires a greater number of trained social workers and nurses to screen and manage common mental issues and refer severe cases to specialists (Hoeft et al. 2017; Behera et al. 2018).

Include mental health training as an essential component of the curriculum for medical professionals, health workers and frontline workers.

There is a significant dearth of trained mental health professionals in the health system. This calls for the inclusion of standardised and mandatory mental health education in the undergraduate medical curriculum, to equip healthcare providers for timely identification and detection of mental illness.

Build facility-level infrastructure to address the treatment gap and ensure access to quality and affordable mental healthcare services.

There are insufficient facilities providing mental health services. All surveyed states

do not even have one mental health hospital or general hospitals with psychiatry units, per lakh of the population. As a result, people travel long distances to access care and hence, it is important to integrate mental services within primary healthcare.

The demand for mental health care exceeds the supply. As a result of this skewed supply, the average out-of-pocket expenditure is between ₹1,000-₹1,500 to access mental health services further reducing accessibility, especially for the vulnerable and marginalised population (NMHS 2016).

Set up a central registry to monitor, identify and register mental health professionals across the states.

The data is insufficient as there is no central portal to regulate and identify the number of mental health professionals registered across the country. Ensuring a robust Management Information System (MIS) will help identify regions and areas requiring urgent attention and enable focused action towards task sharing.

The availability of mental health units in hospitals is grossly inadequate.

Considering the overall population of India, inter-state variations aside, the number of hospitals with psychiatry units or psychiatry services facilities is tremendously low across all regions.

Per lakh of the population across all states in India do not have access to either a dedicated mental health hospital or a general hospital with psychiatry units. With 29 general hospitals

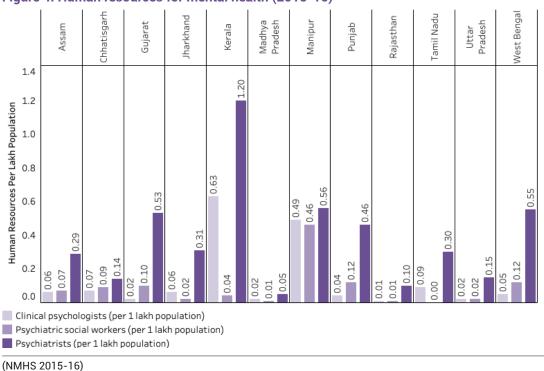


Figure 4: Human resources for mental health (2015-16)

with psychiatric units Punjab has the highest number of such facilities, while Rajasthan has none. In a large state like Tamil Nadu there is only one dedicated mental hospital, while Manipur is worse with none. These demonstrate the glaring disparities at the state level.

Across states, on average, one general hospital with a psychiatry unit is present for roughly a population range of 14-45 lakh people. Most states have less than two mental hospitals for every crore of the population, making this a priority for action.

All states do not have sufficiently trained human resources for mental health.

Most surveyed states do not have adequate numbers of health personnel for mental health. Kerala is the only state where there is at least one psychiatrist available per lakh population. Madhya Pradesh and Uttar Pradesh have as few as one clinical psychologist and psychiatric social worker per crore of the population. A majority of states have one clinical psychologist and psychiatric social worker per 15 lakh of the population highlighting a critical need. Further, there are more psychiatrists available than psychiatric social workers (NMHS 2016).

This skew in the nature of trained service providers is important to address. Frontline health workers and other social workers are the first points of contact with the community and hence, it is critical that a greater number of the non-medical workforce are trained. Unless mental health services at the primary level are ensured and task-shifting is enabled with a strong trained cadre of health workers and non-clinical mental health professionals, the country will continue to face a treatment gap. A strong system at the primary level, ensuring prevention, promotion, screening and early detection, complemented with strong referral systems for specialised care, is key to addressing mental health challenges in a populous and diverse country like India.



3. Policy Prioritisation and Implementation

As the key implementation arm of the National Mental Health Policy, the Government of India launched the NMHP in 1982, keeping in view the heavy burden of mental illness in the community, and the absolute inadequacy of mental health care infrastructure in the country. It focused on the treatment of the mentally ill, provision and access to rehabilitation and prevention and promotion of positive mental health.

In 1996, the DMHP was first launched in four districts. Over the years, the DMHP has expanded and the Government of India continues to implement it under the guidelines of the 12th Five Year Plan (FYP) (Mahajan et al. 2019). It aims to provide sustainable mental health services, conduct timely detection and treatment of people with mental illness, ensure that people have easy access to care, drive prevention and promotion to reduce stigma and provide rehabilitation services all within the community (IMHO 2021).

The National Mental Health Policy 2014 adopted an integrated, participatory, rights- and evidence-based approach to mental health (MoHFW 2014). This national policy aims to ensure that all segments of the population, especially the marginalised and vulnerable, have access to affordable and quality mental healthcare services.

More recently, India passed the Mental Healthcare Act 2017, recognising the massive burden of mental illness, inadequate infrastructure, socio-cultural barriers and shortcomings in the outlook of the Mental Healthcare Act 1987 (Mishra & Galhotra 2018). The Act adopts a rights-based approach to mental health and directs states to set up bodies to govern implementation at the state level.

However, implementation of the national policy, the Act and the district and national programmes are inadequate and ineffective.

The amount of funding allocated to two national institutes – NIMHANS and Lokopriya Gopinath Bordoloi Regional Institute of Mental Health (LGBRIMH) – has risen over the years. However, despite their share of 94% of the mental health allocation in the 2022-23 budget, their focus is more on treatment than on prevention or promotion (Mona 2022). This highlights serious concerns about a highly treatment-focused approach to mental health in the country, and a lack of a systems approach or focus on awareness and stigma around mental health.

RECOMMENDATIONS FOR ACTION

Increase budget allocation for mental health by the Government, as part of the national health budget, recognising the rising mental health burden in India.

Despite a National Mental Health Policy and amendments in the Act passed in 2017, which indicate policy prioritisation and intent with respect to mental health, the budget allocation does not reflect this. Not only does the amount allocated to mental health form only 0.7% of the overall healthcare budget, but it is also insufficient to treat 197.3 million people with mental illness (Sagar et al. 2019; IMHO 2022).

Increase budget allocation to the NMHP and DMHP within the mental health budget to enable effective implementation beyond a treatment-focused approach.

The NHMP, which is the government's primary lever of implementation of mental health care, has consistently received only 40 crores, or 7%, over the last four years.

Under the DHMP, ₹83.20 lakhs per district per year is provided for the detection, management, treatment of mental disorders or illness, and additional components like suicide prevention services, workplace stress management, life skills training, and counselling in schools and colleges (PIB 2022). The funds are insufficient for effective implementation across districts to effectively cover all focus areas.

Establish governance mechanisms and enabling systems to ensure effective utilisation of allocated funds by the NMHP and DMHP.

While the budget allocated to the programmes was insufficient, the under-utilisation of the limited funds further indicates a glaring lack of prioritisation of mental health.

Revised estimates for NMHP in the FY 2018-19 and FY 2019-20 declined by 89% and 87.5% respectively. This could be attributed to the gross underutilisation of funds by the programme. In both years, the actual utilisation of funds was as low as 4-6% (IMHO 2022). State-level governance mechanisms to ensure effective utilisation are critical, which can also establish the need for increased allocation in subsequent years.

Establish state-level accountability and monitor implementation of the Mental Healthcare Act, 2017.

The lack of State Mental Health Authorities (SMHA) across states in the country further widens the treatment and care gap across the nation, raising serious concerns of governance and accountability (Goyal 2020). With the rise in prevalence of mental health issues and suicides post-COVID, state-level prioritisation of mental health to enable implementation is imperative.

Skewed budget allocation for mental health and inadequate funding to NMHP and DMHP.

Budget allocation for NIMHANS has been increasing year-on-year since 2015-16 while for LGBRIMH, it has been on the decline. However, data reflects that a negligible amount of the budget allocated for NMHP has been utilised since 2018-19. Despite the pandemic exacerbating the burden of mental health issues in India, the budget allocation for the NMHP in FY 2022-23 was the same as that for FY 2021-22.

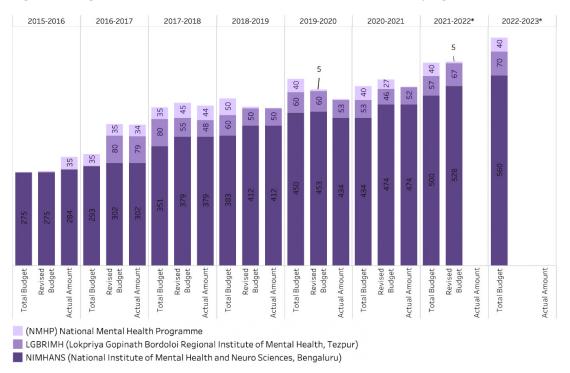


Figure 5: Budget allocation and utilisation across various mental health programmes (in Crores)

(Ministry of Finance n.d.)

Lack of funding, limited prioritisation by states and underutilisation of the budget is also evident in the failure of the NMHP to implement its outlined strategies. The NMHP (2014) outlines key strategies to:

- Integrate mental health within primary health care.
- Ensure the provision of tertiary care institutions for treatment of mental disorders.
- Eradicate stigmatisation of mentally ill patients and protect the rights of people with mental illness by setting up regulatory institutions such as the Central Mental Health Authority (CMHA) and SMHA.

However, there are implementation gaps and challenges across each of these strategies as a result of a limited budget and underutilisation of resources. Health being a concurrent subject, states can exercise autonomy and adapt the DMHP to suit their local contexts. However, this has resulted in an inconsistency in implementation (Varma 2021). The MHA 2017 mandates all states to have a functional SMHA within nine months of the law coming into force, but most of the states have missed the deadline. While a majority of states are also yet to draft the rules of the Act, ten states have not yet set up State Mental Health Authorities (The Pioneer 2019). As of 2019, only 25 states and 2 UTs have set up SMHAs (India Mental Health Observatory n.d.). While SMHAs have been established across the states, there is limited information on their functioning and how active they are.

There is poor coverage of DMHP and inconsistent implementation.

As of February 2022, DMHP coverage has been extended to 704 districts of India. **Despite the launch of the programme 26 years ago, it has still not been implemented in all districts in India** (IMHO 2021). While there has been a rise in the number of districts since 2017, data on the effectiveness of their implementation is unavailable, raising concerns about the on-ground impact. This, combined with a lack of governance, limited funding and statelevel variations, given differences in state-level prioritisation, indicates a need for immediate action by the government.

Although the objectives of the DMHP cover treatment, rehabilitation, accessibility and reduction of stigma through promotion, the implementation has been limited and more focused on treatment. Despite clear structured guidelines on DMHP, the implementation is still inconsistent across the country due to lack of supervision, shortage of trained human resources, lack of regulatory mechanisms, frequent essential drug shortages as well as lack of financial resources across different states (Mahajan et al. 2019).

Ecosystem-level Recommendations

In addition to specific areas of action across the three levers to ensure infrastructure readiness, policy prioritisation and implementation and use of outpatient services, there is a need for broader systemic action.

RECOMMENDATIONS FOR ACTION

Holistically strengthening and creating systems with adequate infrastructure for mental health, with a focus on integration with primary healthcare.

Healthcare needs to integrate mental health within both existing systems and building new ones to ensure adequate care provision and resilience. Holistic systems strengthening for mental health will require action to generate demand, address supply-side challenges and augment enabling systemic factors. Focusing on strengthening systems at a primary healthcare level will help address the existing need, while also enabling efficiencies for future care provision for mental health.

Training an effective mental health workforce within primary healthcare to bridge the mental health treatment gap.

Irrespective of varied prevalence rates across disorders, the treatment gap is very high across all illnesses. Inefficiencies in practice, scarcity and unequal distribution of mental health resources, and inadequate mental health policies and legislation are key challenges in ensuring treatment (Majumdar 2022; Saxena et al. 2007). Rural India bears a disproportionately higher burden at 68%, of mental disability (Census 2011), reinforcing the need to prioritise the integration of mental health into primary healthcare and ensure care reaches the most vulnerable populations. To enable task shifting to address the treatment gap, there is a need to build capabilities among primary healthcare staff, to include mental health screening, diagnosis and basic treatment of mild to moderate mental illnesses as part of their role.

Design programmes and interventions that identify the root cause of the mental health problem and reduce the prevalence overall.

As of 2017, more than 14% of the total population in India suffered from variations of mental disorders. Sociocultural barriers such as gender, marital status, domestic violence or patriarchy contribute to high depression and anxiety, especially among women (Moorkath et al. 2019). With a rise in mental health issues post-pandemic, there is an urgent need to comprehensively address the issue.

Establish targeted prevention and promotion programmes to address suicide rates and create a mental health curriculum in schools to drive awareness among adolescents and young adults.

Since the onset of COVID-19, India witnessed a steep rise in suicides across all age groups, with an 18% rise in suicide among children and adolescents in 2020. While

there is a mainstreaming of mental health conversations post the pandemic, rising suicide rates have received limited prioritisation. This group, therefore, requires dedicated programmes for prevention and building awareness.

Implement workplace mental health programmes in light of the rise in common mental health disorders, focused on disorders related to mood, stress and anxiety.

Certain disorders are lifelong afflictions for sufferers such as mood at 5.6%, neurosis and stress at 3.7% and depression at 5.25%. These call for a targeted preventive and promotive approach. Research indicates that stress at the workplace, and the online mode of work post-COVID, has increased mental health challenges, and calls for action by businesses (Oakman et al. 2020; Xiao et al. 2021).

Create integrated and targeted programmes for substance abuse, in order to reduce their adverse impact on mental health.

Substance use disorders, particularly tobacco use, form the largest share of the burden of mental health issues in India. In light of the growing evidence on tobacco as one of the leading causes of over thirty public health challenges today, addressing this is critical to making an impact on related mental health disorders (Mishra et al. 2012).

Conclusion

The prevalence of mental health issues informs priority areas for action in the ecosystem across the three identified levers: service utilisation, policy prioritisation and implementation and infrastructure readiness. Hence, collaborative action by all stakeholders to prioritise the creation of an overarching enabling system that connects mental healthcare across all levels will be critical. Data-driven approaches to guide action are essential. In the absence of up-to-date data on mental health, it is essential to prioritise research to efficiently fill this information gap. The insights afforded to us on mental health since the pandemic and the tailwinds surrounding it at this time, should not be wasted. The time to call for targeted action to promote, protect and restore mental health and well-being is now, if we are to shift the needle on the state of mental health in India.

Annexure

National Mental Health Programme.

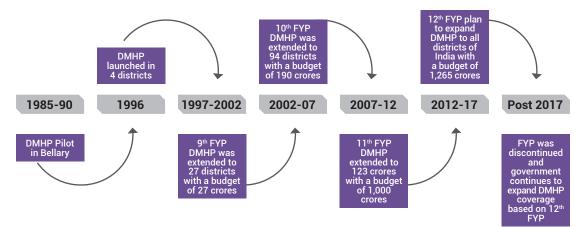
The Government of India launched the NMHP in 1982, keeping in view the heavy burden of mental illness in the community, and the absolute inadequacy of mental health care infrastructure in the country.

The three main components of NMHP were:

- Treatment of the mentally ill
- Provision and access to rehabilitation
- Prevention and promotion of positive mental health

Objectives of NMHP:

- To ensure the availability and accessibility of minimum mental healthcare for all in the foreseeable future;
- To encourage the application of mental health knowledge in general healthcare and in social development;
- To promote community participation in mental health service development;
- To enhance human resources in mental health subspecialties.



District Mental Health Programme.

DMHP is an outcome of the Bellary Project that was conducted by NIMHANS in 1985-90. The Bellary Model was designed to identify and train health cadres to provide mental healthcare support to people with mental illness and their caregivers within the district (Shashtri 2021, p.4). Thus, this project led to the launch of DMHP, as a "service delivery component of NMHP" across districts in India (Shashtri 2021, p.4).

In 1996, DMHP was first launched in 4 districts and expanded to 27 districts during 1997-2002 with a budget allocation of ₹27 crores. Over the years, the DMHP was expanded with an increase in budgetary allocations. Although the 12th FYP was discontinued in 2017, the Government of India continues to implement the DMHP under its guidelines (Mahajan et al. 2019).

Objectives of DMHP:

- · Providing sustainable mental health services in the community
- · Conducting timely detection and treatment of people with mental illness in the community
- Ensuring that people don't have to travel long distances to access care
- Driving prevention and promotion to reduce stigma in the community
- Providing rehabilitation services within the community.

Mental Healthcare Act 2017.

India passed the Mental Healthcare Act 2017, recognising the massive burden of mental illness, inadequate infrastructure, sociocultural barriers and shortcomings in the outlook of the Mental Healthcare Act 1987.

The new act defines "mental illness" as a substantial disorder of thinking, mood, perception, orientation, or memory that grossly impairs judgement or ability to meet the ordinary demands of life, mental conditions associated with the abuse of alcohol and drugs. Another highlight of this Act is to protect the rights of a person with mental illness, and thereby facilitating their access to treatment, and by an advance directive, how they want to be treated for their illness (Ministry of Law and Justice 2017).

Health and Wellness Centres, Ayushman Bharat.

In order to increase residents' access to and affordability of healthcare services, the Indian government introduced the "Ayushman Bharat" scheme in 2018.

Two essential elements of "Ayushman Bharat" consist (National Health Authority n.d.) of:

- Health and Wellness Centres (HWCs): The initiative, which was introduced in February 2018, sought to build 150,000 Health and Wellness Centres to bring comprehensive healthcare services to individuals closer to their homes (HWCs).
- Pradhan Mantri Jan Arogya Yojana (PM-JAY): Launched in September 2018, the Pradhan Mantri Jan Arogya Yojana (PM-JAY) programme sought to provide secondary and tertiary care services to the most vulnerable members of society. The proposal planned to provide impoverished people with medical coverage of ₹5 lakh (\$6.63 thousand) per family per year for secondary and tertiary care hospitalisation.

Mental Health ailments are listed in the AB-HWCs as one of the 12 Non-Communicable Diseases covered by Ayushman Bharat and the HWCs' mandate (NHSRC, 2022). HWCs will concentrate primarily on the early assessment, treatment, and referral of people with mental illnesses. The delivery of these services is done through a coordinated team effort between Auxiliary Nurse and Midwives (ANM), Accredited Social Health Activist (ASHA), the ASHA facilitator, Anganwadi Worker (AWW), and volunteers or local community-based organisations.

References

- Arya, V, Page, A, Spittal, M J, Dandona, R, Vijayakumar, L, Munasinghe, S, John, A, Gunnell, D, Pirkis, J & Armstrong, G 2022, 'Suicide in India during the first year of the COVID-19 pandemic', *Journal of Affective Disorders*, vol. 307, pp. 215-220, DOI 10.1016/j.jad.2022.03.066.
- Behera, P, Amudhan, R S, Gupta, R, Majumdar, A, Kokane, A M & Bairwa, M 2019, 'Adapting the Stepped Care Approach for Providing Comprehensive Mental Health Services in Rural India: Tapping the Untapped Potential', *Indian Journal of Community and Family Medicine*, vol.4. no. 2, pp. 5-10 DOI 10.4103/2395-2113.251440.
- Birla, N 2019, 'Mental health in India: 7.5% of country affected; less than 4,000 experts available', The Economic Times, viewed 4 July 2022.
- Census 2011, *Measurement of Disability through Census National Experiences: INDIA*, viewed 10 July 2022.
- Dattani, S, Ritchie, H & Roser, M 2021, Mental Health Our World in Data, viewed July 2022.
- Goyal, R 2022, Three years on, India's progressive Mental Healthcare Act is dogged by gaps in implementation, Scroll.in, viewed 6 July 2022.
- Gururaj G, Varghese M, Benegal V, Rao GN, Pathak K, Singh LK, Mehta RY, Ram D, Shibukumar TM, Kokane A, Lenin Singh RK, Chavan BS, Sharma P, Ramasubramanian C, Dalal PK, Saha PK, Deuri SP, Giri AK, Kavishvar AB, Sinha VK, Thavody J, Chatterji R, Akoijam BS, Das S, Kashyap A, Ragavan VS, Singh SK, Misra R & NMHS collaborators group 2016, 'The National Mental Health Survey of India 2016: Prevalence, socio-demographic correlates and treatment gap of mental morbidity', *The International journal of social psychiatry*, vol.66, no. 4, pp. 361-372 DOI 10.1177/0020764020907941.
- Gururaj G, Varghese M, Benegal V, Rao GN, Pathak K, Singh LK, Mehta RY, Ram D, Shibukumar TM, Kokane A, Lenin Singh RK, Chavan BS, Sharma P, Ramasubramanian C, Dalal PK, Saha PK, Deuri SP, Giri AK, Kavishvar AB, Sinha VK, Thavody J, Chatterji R, Akoijam BS, Das S, Kashyap A, Ragavan VS, Singh SK, Misra R & NMHS collaborators group 2016, 'National Mental Health Survey of India, 2015-16: Mental Health Systems', National Institute of Mental Health and Neuro Sciences, NIMHANS Publication No. 130, Bengaluru.
- Health Management Information System (HMIS) 2019-2022, *Standard Reports*, viewed 6 July 2022.
- Hilaris Publisher n.d., Mental health morbidity, viewed 4 July 2022.
- Hoeft, T J, Fortney, J C, Patel, V & Unützer, J 2018, 'Task-Sharing Approaches to Improve Mental Health Care in Rural and Other Low-Resource Settings: A Systematic Review', *The Journal of rural health: official journal of the American Rural Health Association and the National Rural Health Care Association*, vol. 34, no. 1, pp. 48-62, DOI 10.1111/jrh.12229.
- Hossain, M & Purohit, N 2019, 'Improving child and adolescent mental health in India: Status, services, policies, and way forward', *Indian journal of psychiatry*, vol. 61, no. 4, pp. 415-419 DOI 10.4103/psychiatry.IndianJPsychiatry_217_18.
- India Today 2018, India is the most depressed country in the world, viewed 5 July 2022.
- Indian Mental Health Observatory (IMHO) 2022, Budget for Mental Health Analysis of Union Budget 2021-2022, viewed 12 July 2022.
- Indian Mental Health Observatory (IMHO) 2022, *Budget for Mental Health Analysis of Union Budget 2022-2023*, viewed 12 July 2022.
- Jayasankar, P, Manjunatha, N, Rao, G, Gururaj, G, Varghese, M & Benegal, V 2022, 'NMHS India

National Collaborator Group Epidemiology of common mental disorders', *Indian Journal of Psychiatry*, vol. 64, no. 1, pp. 13-19 DOI 10.4103/indianjpsychiatry.indianjpsychiatry_865_21.

- Kaur, R & Pathak, R K 2017, *Treatment Gap in Mental Healthcare, Reflections from Policy and Research, Economic and Political Weekly*, viewed on 10 July 2022.
- Mahajan, P, Rajendran, P Sunderamurthy, B, Keshavan, S & Bazroy, J 2019, 'Analyzing Indian mental health systems: Reflecting, learning, and working towards a better future', *Journal* of Current Research in Scientific Medicine, vol. 5, no. 1, pp. 4-12 DOI 10.4103/jcrsm. jcrsm_21_19-.
- Majumdar, P 2022, 'COVID-19, unforeseen crises and the launch of national telemental health program in India', *Journal of Mental Health*, vol 32, no. 4, pp. 1-2. DOI 10.1080/09638237.2022.2091767.
- Math, S B, Murthy, P, & Chandrashekar, C R 2011, 'Mental Health Act (1987): need for a paradigm shift from custodial to community care', *The Indian journal of medical research*, vol.133, no.3, pp. 246-249.
- Meltzer, K n.d., Mental Health Care in India: Prescribing the Right Policy, Pepperdine School of Public Policy, viewed 10 July 2022.
- Ministry of Health & Family Welfare 2014, 'New Pathways New Hope: National Mental Health Policy of India', viewed 12 July 2022.
- Ministry of Health and Family Welfare 2014, National Mental Health Policy of India.
- Ministry of Law and Justice 2017, The Mental Healthcare Act 2017, viewed 5 July 2022.
- Ministry of Social Justice and Empowerment 2019, National Survey on Extent and Pattern of Substance Use.
- Ministry of Finance n.d, Union Budget 2010-2022, viewed 12 July 2022.
- Mishra, A & Galhotra, A 2018, 'Mental Healthcare Act 2017: Need to Wait and Watch', *International journal of applied & basic medical research*, vol 8, no. 2, pp. 67-70, viewed 10 July 2022, DOI 10.4103/ijabmr.IJABMR_328_17.
- Mishra, G A, Pimple, S A & Shastri, S S 2012, 'An overview of the tobacco problem in India", Indian Journal of Medical and Paediatric Oncology: Official Journal of Indian Society of Medical & Paediatric Oncology, vol. 33, no. 3, pp. 139-145 DOI 10.4103/0971-5851.103139.
- Mona 2022, Budget 2022: Is the 'rare mention' of mental health truly an actionable effort?, Observer Research Foundation, viewed 12 July 2022.
- Moorkath, F, Vranda, M, & Naveenkumar, C 2019, 'Women with Mental Illness An Overview of Sociocultural Factors Influencing Family Rejection and Subsequent Institutionalisation in India', Indian Journal of Psychological Medicine, vol. 41, no. 4, pp. 306-310 DOI: 10.4103/IJPSYM. IJPSYM_123_19.
- National Crime Records Bureau 2020, *Accidental Deaths & Suicides in India 2020*, pp. 21, 196-208, viewed 4 July 2022.
- National Health Authority n.d., *About Pradhan Mantri Jan Arogya Yojana (PM-JAY)*, viewed 3 July 2022.
- National Mental Health Program 2014, National Health Portal, viewed 3 July 2022.
- NISD n.d., Substance Abuse Prevention, viewed 4 July 2022.
- Oakman, J, Kinsman, N, Stuckey, R, Graham, M & Weale, V 2020, 'A rapid review of mental and physical health effects of working at home: how do we optimise health?', *BMC Public Health*, vol. 20, no. 1, pp. 1825, DOI 10.1186/s12889-020-09875-z.

- Padukone D, Doraiswamy P M, Chandy A 2018, 5 charts that reveal how India sees mental health, World Economic Forum, viewed 3 July 2022.
- Press Information Bureau 2022, Allocation of funds for mental health, viewed 13 July 2022.
- Ram, D & Mathew A 2021, 'Psychosocial burdens of women in India A narrative review', *Journal of the Scientific Society*, vol. 48, pp. 138-44, DOI 10.4103/jss.jss_107_21.
- Sagar, R, Dandona, R, Gururaj, G, Dhaliwal, R S, Singh, A, Ferrari, A, Dua, T, Ganguli, A, Varghese, M, Chakma, JK, Kumar, G A, Shaji, K S, Ambekar, A, Rangaswamy, T, Vijayakumar, L, Agarwal, V, Krishnankutty, RP, Bhatia, R, Charlson, F, Chowdhary, N, Erskine, H E, Glenn, S D, Krish, V, Mantilla Herrera, A M, Mutreja, P, Odell, C M, Pal, P K, Prakash, S, Santomauro, D, Shukla, D K, Singh, R, Singh, R K L, Thakur, J S, ThekkePurakkal, A S, Varghese, C M, Reddy, K S, Swaminathan, S, Whiteford, H, Bekedam, H J, Murray, C J L, Vos, T & Dandona, L 2019, 'The burden of mental disorders across the states of India: the Global Burden of Disease Study 1990–2017', *The Lancet Psychiatry*, vol. 7, no. 2, DOI 10.1016/S2215-0366(19)30475-4.
- Save the Children 2021, COVID-19: children globally struggling after lockdowns averaging six months, viewed 5 July 2022.
- Schønning, V, Hjetland, G J, Aarø, L E & Skogen, J C 2020, 'Social Media Use and Mental Health and Well-Being Among Adolescents - A Scoping Review', *Frontiers in psychology*, vol. 11, pp. 1949, DOI 10.3389/fpsyg.2020.01949.
- Shastri, M 2021, Deconstructing the DMHP. Part I Introduction to India's District Mental Health Programme, Indian Mental Health Observatory, viewed 12 July 2022.
- The Economic Times 2021, 'India saw 31 children die by suicide every day in 2020; experts say COVID-19 upped trauma', viewed 3 July 2022.
- Taluvale, D 2020, Farmer Suicides in Maharashtra, 2001-2018, Economic and Political Weekly, pp. 7-8, viewed 10 July 2022.
- The Pioneer 2019, 10 States yet to set up mental health body, viewed 12 July 2022.
- UNICEF n.d., UNICEF report spotlights on the mental health impact of COVID-19 in children and young people, viewed 5 July 2022.
- Verma, A 2021, Deconstructing the DMHP. Part IV A critique of the District Mental Health Programme, Indian Mental Health Observatory, viewed 12 July 2022.
- WHO 2014, Social Determinants of Mental Health, viewed 12 July 2022.
- WHO 2022, World mental health report: transforming mental health for all, World Health Organisation.
- Xiao, Y, Becerik-Gerber, B, Lucas, G & Roll, S C 2021, 'Impacts of working from home during COVID-19 pandemic on physical and mental well-being of office workstation users', *Journal* of Occupational and Environmental Medicine, vol. 63, no. 3, pp. 181-190, DOI 10.1097/ JOM.00000000002097.

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