



Delhi School *of*
Artificial Intelligence



AI for Mental Health



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Artificial Intelligence

Role of AI in Mental Health

| **A Focus on Indian Youth**

Foreword

Mental health is a growing concern in India, especially amongst the Youth. With 50% of India being under the age of 25 years, that is a staggering 730 million people, the importance of protecting young minds cannot be understated. Government of India's own data shows that 10–15% of India's youth experience a diagnosable mental illness, yet an overwhelming 70–90% of such cases remain untreated due to stigma, lack of awareness, and scarce resources.

Suicide ranks among the top causes of death for Indian youth aged 18–30 years, with nearly 35% of suicides in recent years occurring in this age group. In contrast, the shortfall of healthcare practitioners is critical: with India having only ~0.75 psychiatrists per 1,00,000 population, which is far below the WHO benchmark of 3 per 1,00,000 people. In this context, AI-based innovations like chatbots, mobile apps, predictive analytics etc. can be explored to enable mental care for youth.

Recent technological developments across the globe have demonstrated AI tools like therapeutic chatbot *Wysa* can reduce depressive symptoms and engage young users, while our own national Indian initiatives such as AIIMS's "*Never Alone*" app on WhatsApp are being used in college settings.

However, experts caution that AI chatbots may lack human empathy, crisis response capacity and can propagate bias or misinformation in unsupervised settings. Ethical concerns around privacy and accountability are also acute in the Indian context.

Leading global organizations such as WHO, UNICEF, UNESCO and national entities like NIMHANS (National Institute for Mental Health and Neurosciences) and IHBAS (Institute of Human Behaviour and Allied Sciences) emphasize that AI should complement, not replace human support, be rigorously validated and be implemented with adequate safeguards for youth engagement.

This special report reviews current evidence and initiatives on the use of artificial intelligence for youth mental health across India, covering prevalence and policy gaps, AI use cases and outcomes, and ethical and adoption issues.

It finds that while AI holds promise to extend reach, through 24/7 chatbots, automated screening, AI-powered helplines, etc. success will depend on culturally appropriate design, multilingual set-ups, stigma-awareness, robust privacy protection, and integration into broader systems such as schools and colleges.



Muskan Abbasi

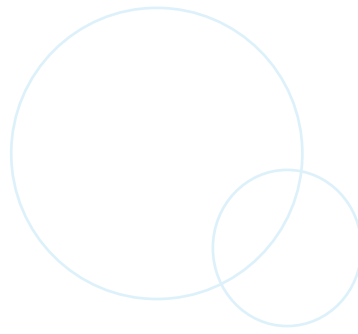
Researcher
Delhi School of AI

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Introduction

AI for Mental Health



Mental health is integral to overall well-being, especially in youth and young professionals, when many psychiatric conditions first emerge. Globally, mental health issues cause significant disability for the youth. Half of all lifetime mental illnesses begin by age of 14, yet mental health needs often go unmet. In India, with over 1.46 billion people (18% of world population) and the world's largest youth demographic, the challenge is hugely complex. Government of India data indicates 10.6% of adults suffer from mental disorders, and up to 15% experience issues requiring timely intervention. The treatment gap is enormous: with 70–92% of affected individuals get no care. Adolescents and youth carrying a disproportionate share of the burden. Suicide alone claimed up to 1.7 lakh lives in India in 2022, the highest in decades, with ages 18–30 accounting for 35% of suicides. The COVID-19 pandemic and severe academic pressure have further strained young people's mental well-being and childhoods.

Traditional mental health services are insufficient. India has a big shortage of specialists and virtually no specialist services in most rural areas. Many young people in the country delay seeking help due to stigma, cultural norms and lack of awareness. Schools and community centers are only beginning to address these gaps; with UNESCO and UNICEF having launched school-based curricula and peer-support modules to de-stigmatize youth and issues of mental health. These initiatives have been adopted by NCERT, CBSE, ICSE, UGC and the Ministry of Education.

Against this backdrop, Artificial Intelligence (AI) is being explored as a way to augment India's mental health care for youth. AI technologies ranging from simple rule-based chatbots to sophisticated machine-learning algorithms, can potentially automate screening, provide 24/7 support, analyze risk patterns, and extend the reach of scarce therapists. Globally, AI-driven tools are transforming mental health delivery. A recent systematic review found that AI enhances early detection and intervention: chatbots and predictive analytics “*improve patient engagement and tailor interventions,*” with tools like the AI enabled *Wysa* app yielding significant symptom improvement. However, integration of AI also raises its own challenges such as ethical, data privacy issues, algorithmic bias and lack of empathy - that experts caution must be carefully managed.

In this report, we first review the mental health landscape for Indian youth, followed by a description of the AI technological landscape in this field, using key use cases and global evidence. We then survey India-specific AI initiatives and studies, including national programs, pilot projects and usage statistics. Finally, we discuss critical ethical, privacy, and adoption issues relevant to deploying AI for mental health in India.

Mental well being must be prioritised.

Current State of Mental Health amongst Indian Youth

Prevalence and Burden

Multiple sources highlight that mental health problems among Indian youth and young adults are widespread and under-recognized. UNICEF reports that 436 million Indian children and adolescents face a dire mental health crisis, with services “lagging considerably” in policy discussions. Globally, 50% of mental disorders begin by age 14, and Indian studies echo this. In older adolescents (18–24), surveys indicate high levels of anxiety, depression, and stress. For example, school-based studies note that 23–33% of adolescents have one or more psychiatric symptoms. Suicide rates further underscore the severity: NCRB data shows a record 1,70,924 suicides in 2022, a 56-year high, with youth (18–30) being the single largest group (35% of suicides). Academic pressure, familial expectations, and urban stressors are frequently cited as the precipitating factors.

These findings are consistent with global organizations. WHO data for India indicates a suicide rate of 21.1 per 1,00,000 (age-adjusted) due to mental disorders. Economic analyses estimates that untreated mental health issues could cost India over USD \$1.03 trillion by 2030. UNICEF warns that “most cases go undetected and untreated” amongst children, lamenting that mental health has been historically underfunded in India. At least 1 in 5 Indian youth may experience a mental health issue in their lifetime, yet only a small fraction have access to services.

Barriers to Care and Policy Gaps

Youth seeking mental health support in India face multiple barriers. *Stigma* remains pervasive: surveys indicate that 70–80% of Indians with mental health conditions (in any age group) never seek treatment due to shame, fear of judgment, and lack of trust. Cultural attitudes often normalize youth depression or anxiety as “just stress,” delaying recognition. *Accessibility* remains a problem with trained mental health professionals being extremely scarce outside major cities. India has only 0.75 psychiatrists per 1,00,000 people and virtually no school counselors in rural areas. Even where tele-health platforms such as Tele-MANAS, e-Sanjeevani exist, their reach is still limited, and they are not yet widely integrated with AI technologies. *Cost and digital divides* also matter: while over 50% of India’s population are internet users, many rural youths have intermittent connectivity and few local language tools.

Policy efforts are underway but gaps remain. The Mental Healthcare Act (2017) and National Mental Health Programme aim to expand services and protect patient rights, but implementation is uneven. Recent government reports note that 25 Centres of Excellence and dozens of new psychiatry departments have been added. UNICEF and NIMHANS are collaborating under the RKSK initiative (Rashtriya Kishore Swasthya Karyakram) on youth mental health guidelines and peer-support modules, but the integration of AI has not yet been formalized in national programs.

COVID-19 and Mental Health Crisis in India

The COVID-19 pandemic quickly became one of the biggest global crises in generations. It has had severe and far-reaching repercussions for India and its healthcare system, economy and society. **Countless people have died, or lost their livelihoods.**

Families and communities have been strained and separated. Children and young people have missed out on learning and socializing. Businesses have gone bankrupt, especially the in the informal economy. Millions of people have fallen below the poverty line.

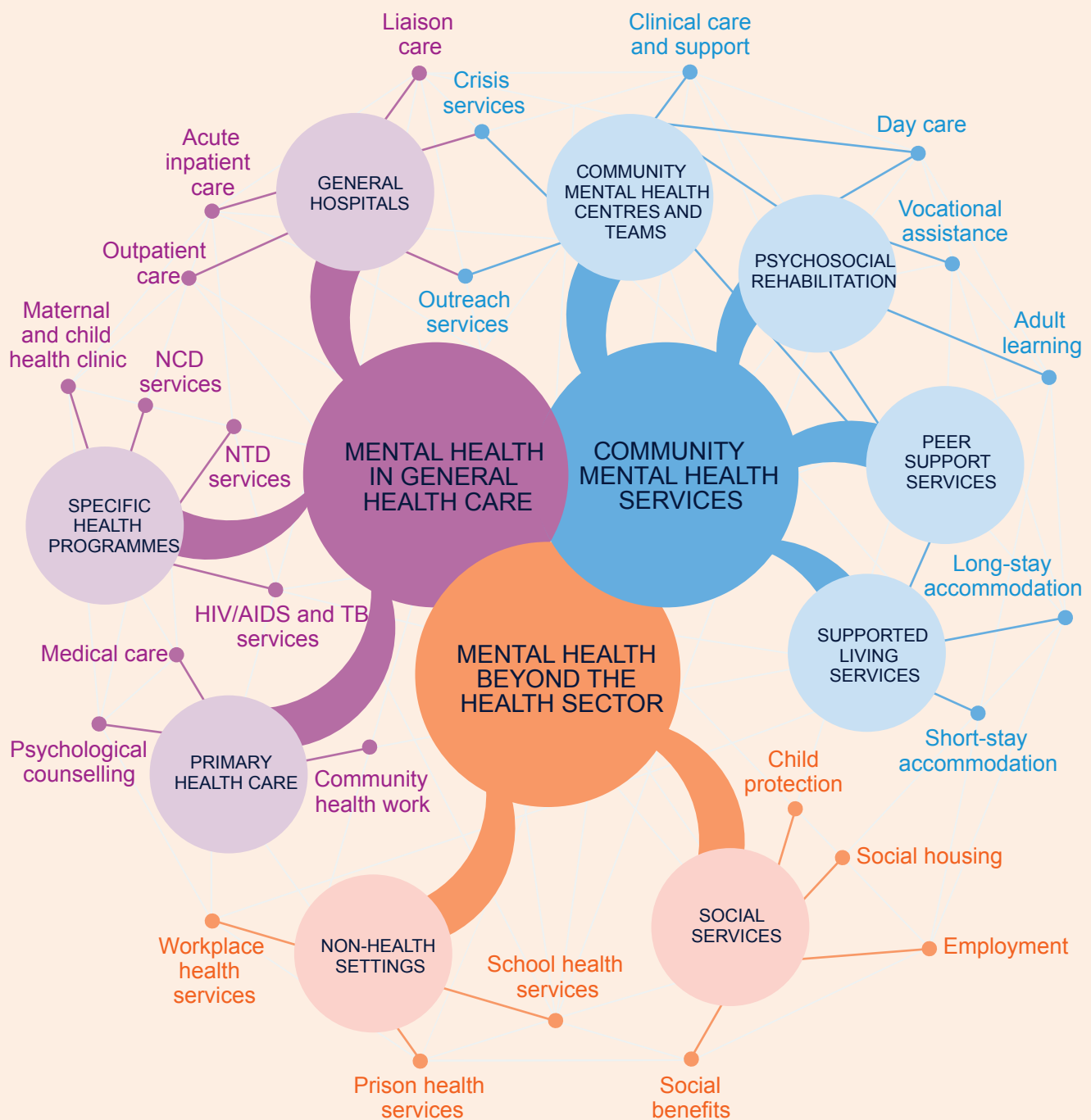
Mental health has been widely affected due to the pandemic. Anxiety, fear and trauma caused during different waves of COVID-19 have sparked or amplified serious mental health problems. At the same time, mental health services were severely disrupted, especially in the first year of the pandemic. Social safety measures frequently prevented people from accessing care, and in many cases fear of the virus stopped people from seeking help. Too many people in India could not get the mental health support they needed during and since the pandemic.

As the pandemic evolved, national public health measures changed, as did mental health stressors and impacts. Impacts during the two COVID-19 waves and National Lockdowns (2020-2021), when huge uncertainty and high death rates fuelled widespread panic and distress, were quite different from those seen during later stages, when isolation and fatigue became bigger threats to well-being.

Even today, India continues to suffer from far reaching consequences of the pandemic, especially amongst our children and youth, whose lives were completely upended.



Model Network of community-based Mental Health Services



Community networks played a critical role during the COVID-19 Pandemic in India

Where government medical services failed and lack of vaccines during the deadly 2nd wave of the pandemic led to widespread death, it was communities who came together to protect and care for their own.

Technological Landscape

AI technologies offer a diverse toolkit for mental health applications. Broadly, these include AI-driven chatbots and virtual therapists, diagnostic and predictive algorithms, and personalized digital interventions.

AI Chatbots and Virtual Therapy

One of the most visible AI trends is the use of chatbots and conversational agents for emotional support. Chatbots are software programs, often smartphone applications that simulate human conversation using natural language processing (NLP). They engage users in dialogues to assess their moods, offer coping strategies, or simply provide empathic listening. Examples include *Woebot*, *Wysa*, *Tess* and emerging platforms powered by large language models (LLMs). Chatbots are appealing because they are available 24/7, are anonymous, and can deliver cognitive behavioral techniques (CBT) at low cost. Studies have demonstrated that interacting with chatbots can measurably reduce anxiety and depressive symptoms, using AI conversational agents. *Wysa* — a chatbot with broad usage in India — has shown to quickly establish a therapeutic alliance with users, who reported feeling “liked, respected, and cared for.”

For youth in India, chatbots can overcome cultural barriers with anonymity reducing fear of stigma, and gamified interfaces can be more engaging for younger users. A recent “Youth Pulse” survey found that 88% of Indian school students had turned to AI tools during stress, primarily because anonymity made them more comfortable. Globally, AI chatbots are gaining adoption: **by mid-2025, an estimated 200 million people have used AI mental health apps, with 45% of users in Asia.** Among U.S. adults, ~35% reported using AI therapy tools in 2025 (up from 15% in 2023), indicating rapid growth.

Many mental health professionals now use AI tools, suggesting increasing institutional acceptance.

Diagnostics and Predictive Tools

Beyond chat interfaces, AI excels at pattern recognition in complex data. In mental health, researchers are training algorithms to identify markers of conditions from speech, text, facial expression, or digital behavior. For example, machine learning models can analyze written or spoken language to detect early signs of depression or suicidal ideation by spotting linguistic cues.

Social media usage patterns and smart phone sensor data on sleep and movement are also studied as predictors of mood disorders. Though still largely in research phase, these predictive tools promise to flag at-risk youth before crises emerge. Some pilot apps use wearable sensors to monitor stress physiology such as heart rate variability and prompt coping exercises. In India, a project called *Mindful* is exploring AI analysis of WhatsApp messages (with consent) to triage users to appropriate care levels. While concrete outcomes are pending publication, this trend fits a global move toward “**digital phenotyping**” in psychiatry.

Personalized Interventions

AI also powers personalization. By analyzing user responses and outcomes, systems can tailor therapy content over time. Apps may adjust the difficulty of cognitive tasks or the style of motivational messages based on individual progress. Virtual reality therapies, augmented by AI, to treat phobias or anxiety are under early trials. Importantly, AI enables multilingual and culturally adapted interventions. India’s “Bhashini” initiative (by MeitY) provides AI driven translation tools that helps mental health apps operate in dozens of Indian languages, expanding reach in rural areas.

AI Initiatives and Evidence in India

National Programs & AI Integration

The Indian government and institutions have begun experimenting with AI in youth mental health. A flagship example is “*Never Alone*”, an AI-driven mental health program launched by AIIMS Delhi (with AIIMS Bhubaneswar and IHBAS Delhi) in September 2025. This WhatsApp based platform provides 24/7 screening, counselling, and follow-up for college students, blending AI with human “well-being partners.” Students can take an initial AI-guided screening (costing only ₹0.70/day) and receive personalized recommendations or referral links. The app is designed to break stigma by ensuring anonymity while still connecting students to counselors or psychiatrists as needed. Other national schemes like the Tele-MANAS helpline and National Health Mission’s Health Wellness Centres have the infrastructure to incorporate AI chatbots, screening tools.

Major research institutions are also exploring AI. NIMHANS Bangalore — the nodal center for mental health in India — hosts pilot projects on AI chatbots and digital cognitive therapies. The *Global Centre of Integrative Health* (an NGO affiliated with AIIMS alumni) is working to roll out *Never Alone* across India without charge. Private startups like *Wysa*, *ThoughtFull*, *InnerHour* and academic teams are conducting trials of AI interventions in schools and clinics.

UNESCO and UNICEF have highlighted the need for “Ethical AI guidelines” and child-centric AI strategies in their policy dialogues, signaling that future government frameworks may formalize AI’s role in mental health.

Efficacy & User Engagement

Empirical evidence for AI tools in India is still emerging, but the global literature is instructive. A 2025 systematic review found that AI-driven chatbots and predictive models “significantly improve user reported mental health symptoms” and patient engagement. For example, India’s own *Wysa* app (originating in India) has been evaluated in randomized trials and shown to reduce symptoms of anxiety and depression in just a few weeks. In India specifically, the Observer Research Foundation cites a Youth Pulse survey where 88% of students used AI tools in distress, and many reported feeling safe and heard by chatbots. Clinician surveys indicate growing interest: a majority of psychiatrists believe AI can enhance outcomes, particularly through early screening and personalized suggestions.

However recent reports indicate that popular therapy chatbots can fall short of professional standards. Chatbots often inadvertently stigmatize certain conditions e.g. substance dependence, and may mishandle crises, offering dangerous reassurance to suicidal cues. A NIMHANS analysis similarly warns of “inability to handle crises”, misinformation, and privacy breaches by AI bots. These caveats underscore that while AI tools can fill gaps in access and scalability, they should complement rather than replace human care. In practice, pilot programs like *Never Alone* use “human insights” alongside AI – for instance, training student volunteers to act as on-campus peers while AI screens students. This hybrid approach acknowledges both the promise of AI and its current limitations.

Ethical, Privacy, and Adoption Considerations

Implementing AI for youth mental health in India requires addressing numerous ethical and practical issues:

Safety and Crisis Response: As noted, AI chatbots are not trained clinicians. They may fail to detect or appropriately respond to suicidal intent or severe psychosis. Any deployed AI system must have safeguards like built-in escalation protocols, links to emergency services and clear disclaimers. UNICEF and WHO emphasize involving youth voices to ensure tools “are developed, deployed, and governed” with community input.

Data Privacy and Consent: Youth data, which often contains sensitive mental health information, must be strictly protected. India’s Digital Personal Data Protection Act (2023) and the Ayushman Bharat consent framework *mandate minimal data collection and explicit opt-in for any secondary use*. Chatbot interactions must be encrypted and anonymized. NIMHANS warns that without strong safeguards, private conversations could be misused or hacked. Policies should limit retention, require audit trails, and ensure no third-party sharing. Parental consent and age-appropriate user agreements are also crucial for minors.

Bias and Inclusivity: AI systems inherit biases from their training data. Most global mental health datasets are Western-centric. To serve India’s youth, models must be trained on diverse Indian populations, languages, and cultural contexts. UNESCO and NITI Aayog have called for ethical AI guidelines to address fairness. For example, *young girls in India may express depression differently - through irritability or body/figure complaints - than Western girls*. If unaddressed, AI tools risk underdetecting or misinterpreting symptoms in Indian youth. Efforts like India’s Bhashini program (for AI translation) and NIMHANS’s contextualized content are steps toward inclusivity.

Regulation and Accountability: Currently there is **no** AI-specific law for healthcare in India, with only the Indian Council of Medical Research (ICMR) having published “*AI ethics principles for safety, fairness, transparency in healthcare*.” NIMHANS has found “ethical and legal gray areas” around who is responsible if a chatbot gives harmful advice. In practice, any AI mental health application should ideally be certified by regulators and follow international standards. The government’s IndiaAI Safety Institute, proposed in the November 2025 **AI Governance Guidelines** by MeitY could play a role by benchmarking AI health tools.

User Adoption and Literacy: Adoption depends on trust and usability. Surveys suggest a majority of youth are open to digital mental health aids, especially when anonymity is assured. However, actual uptake may be hindered by digital divides. UNICEF data point out that rural youth often lack reliable internet and devices. Programs must ensure offline access where possible - e.g. SMS-based AI, or integration into school computer labs. Engagement strategies can help youth stick with AI interventions. Continuous monitoring of real-world use is needed to adapt tools to India’s diversity.

In summary, **ethical deployment is paramount**. India’s leadership has begun articulating principles and are emphasizing on safeguarding privacy, bridging the digital divide, and ensuring AI is “human-centric.” Civil society and experts advocate a hybrid model where AI amplifies human care but does not replace it. Transparency (users knowing they are interacting with AI), minimal data collection, and third-party oversight are key themes from WHO/UNICEF guidance.

Conclusions and Recommendations

AI offers a transformative opportunity for addressing the mental health needs of India's youth. As this report shows, AI-driven chatbots, screening tools, and personalized apps can greatly expand access and early intervention for conditions like anxiety and depression. Early evidence (e.g. *Wysa*, *Never Alone*) is encouraging. However, for maximal benefit and minimal harm, policymakers and practitioners must proceed carefully.

Key Recommendations

Embed AI in Integrated Care: Position AI tools within existing frameworks such as schools, RKSK peer support, tele-mental health networks - rather than standalone. For instance, Chatbots should triage to human counselors when needed. The Indian government's expansion of Tele MANAS and Ayushman Bharat is an opportunity to pilot AI augmentation under expert oversight.

Youth Involvement and Accessibility: Involve youth from diverse backgrounds in design and testing of AI tools to ensure cultural resonance and digital accessibility. Leverage India's language AI platforms (like Bhashini) to localize content. Ensure offline fallback options for low connectivity areas.

Ethical Frameworks and Regulation: Develop clear guidelines for AI mental health tools. This includes enforcing the DPDP Act for consent, adopting ICMR's AI-in-health principles (safety, equity), and accrediting tools through bodies like the proposed IndiaAI Safety Institute. Academic and industry stakeholders should engage with the WHO/ITU Global AI for Health initiative to align with global best practices.

Capacity Building: Train mental health professionals on digital literacy and the use of AI tools. Equally, sensitize them to the limitations of AI (as emphasized by NIMHANS) so they can supervise AI usage. Investment is needed to increase psychiatrists and counselors, the current budget is only ~2% on mental health, but in parallel AI can alleviate some workload.

Research and Monitoring: Encourage Indian research on AI efficacy in local contexts. For example, conduct randomized control trials of chatbot interventions in Indian schools or colleges, and evaluate digital phenotyping algorithms on Indian social media data. Systematically monitor outcomes like symptom reduction, service uptake and report transparently. WHO and UNICEF emphasize evidence-based approaches.

In conclusion, AI is not a panacea, but a powerful tool in the mental health arsenal. When thoughtfully integrated with human care, it can extend reach and personalize support for India's young population. With guided oversight and community trust, AI could help realize the constitutional right to mental health under Article 21 "Right to Life" for every Youth in India.

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Muskan Abbasi • Ayush Garg

