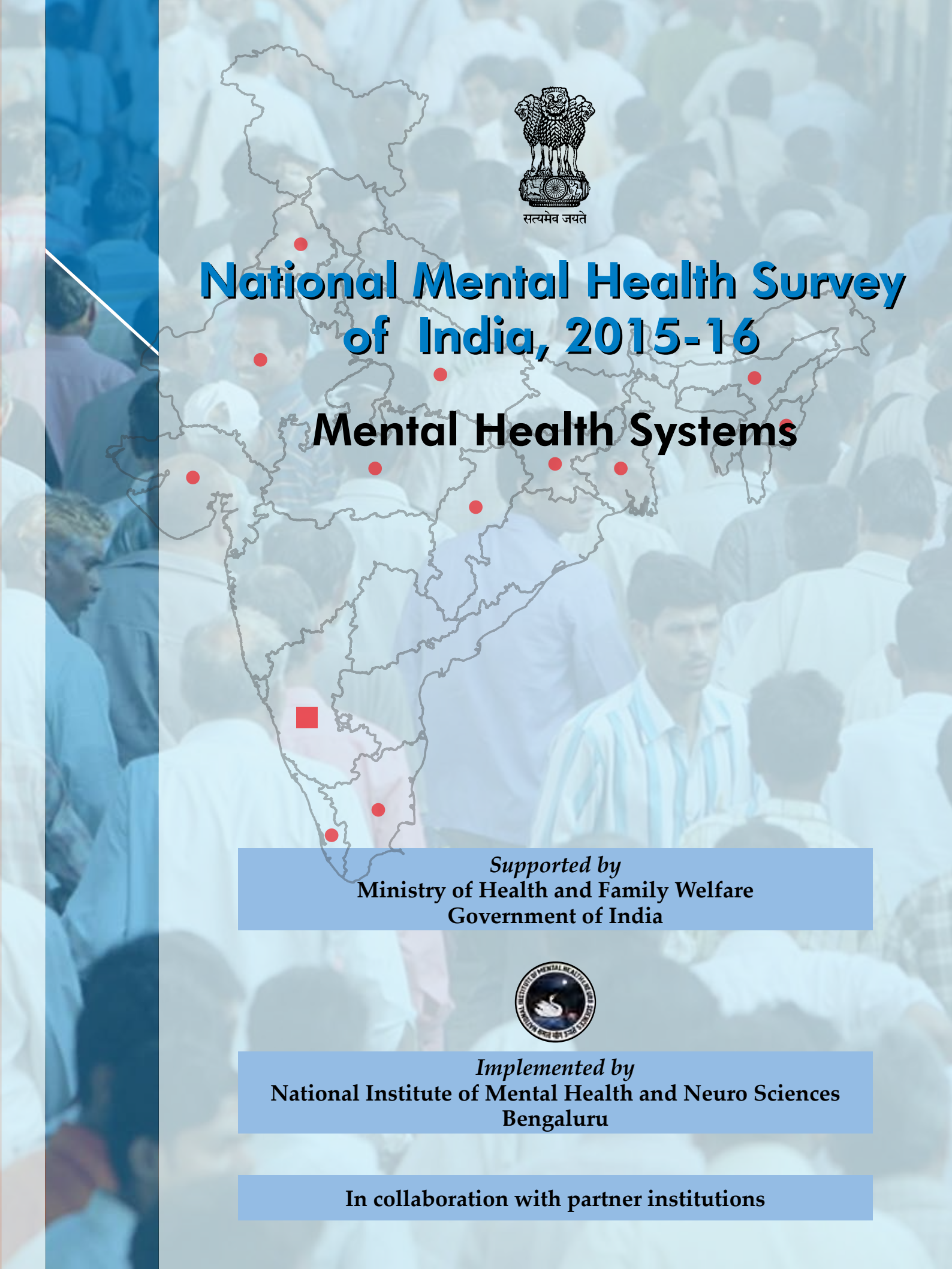

सत्यमेव जयते

National Mental Health Survey of India, 2015-16

Mental Health Systems

Supported by
Ministry of Health and Family Welfare
Government of India

Implemented by
National Institute of Mental Health and Neuro Sciences
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In collaboration with partner institutions

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A Government of India Organization

LGBRIMH LOKOPRIYA GOPINATH BORDOLOI REGIONAL INSTITUTE OF MENTAL HEALTH

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स्वास्थ्य एवं परिवार कल्याण मंत्री
भारत सरकार
Minister of Health & Family Welfare
Government of India

Message

The Ministry of Health and Family Welfare, Government of India commissioned NIMHANS, Bengaluru to undertake a nationally representative mental health study to understand the burden and patterns of mental health problems, examine treatment gap, health care utilization patterns, disability and impact amongst those affected. It is one of the largest mental health "Research and Action" oriented study undertaken in recent times across 12 states of India.

This study has provided us major insights into the magnitude of problem and state of service and resources to strengthen mental health programmes. The comprehensive Mental Health Systems Assessment has brought out the strengths and weaknesses in the system of mental health care in the states.

I take this opportunity to congratulate the NIMHANS team and all State teams of nearly 400 members for undertaking and completing this task promptly with utmost care and quality.

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Foreword

Mental health and well-being, across civilisations, have received attention although variably. The ancient science of Yoga emphasises *'chittavrittinirodha'* i.e., to calm the oscillation of the mind towards stability. Public Health focus was provided by the landmark World Health Report - 2001 titled "Mental health: new hope, new understanding". Beginning with the World Health Day 2001 theme "Stop exclusion – Dare to care", there has been a renewed effort to mainstream mental health along with the growing Non Communicable Disease agenda. There is thus an urgent need to identify the force multiplier for mental health. A dedicated Mental Health Policy, the new mental health care bill are definitely right steps in this direction. The just concluded National Mental Health Survey (NMHS) needs to be considered as another beginning being made for accelerating solutions for mental health care services across the country.

The National Mental Health Survey has quantified the burden of those suffering from mental, select neurological and substance use problems. NMHS has also undertaken the onerous task of identifying the baseline information for subsequent development of mental health systems across the states. The results from the NMHS point to the huge burden of mental health problems: while, nearly 150 million Indians need mental health care services, less than 30 million are seeking care; the mental health systems assessment indicate not just a lack of public health strategy but also several under-performing components. NMHS by providing the much needed scientific rigour to plan, develop and implement better mental health care services in India in the new millennium, has hence termed its report as "Prevalence, Patterns and Outcomes" and "Mental Health Systems".

The NIMHANS team had 125 investigators drawn from nearly 15 premier institutions pan-India. The NMHS has been a unique activity entrusted to NIMHANS. Team NIMHANS has worked tirelessly over the last two years. The 50+ strong team from Epidemiology and Mental health takes credit for this accomplishment. I would like to specially compliment the former Director, Prof Satish Chandra, who took special interest and laid a firm foundation for the NMHS activities and all expert members for their unstinted support and continued guidance. The Ministry of Health and Family Welfare, Government of India as the nodal agency for mental health provided the financial resources for the survey and also facilitated the smooth conduct of the survey related activities in the individual states. The Joint Secretary chaired the NTAG meetings and guided the work.

The recommendations of the present report are structured to make a better beginning as well as to enhance and improve care where it already exists. It provides for a public health framework to monitor and evaluate plans, programs and services. We look forward to the continued dialogue and feedback, whence we take a pledge to improve mental health care systems in our country.

Place: Bengaluru
Date: 07-10-2016

(Prof B N Gangadhar)
Director – NIMHANS

Preface

With changing health patterns among Indians, mental, behavioural and substance use disorders are coming to the fore in health care delivery systems. These disorders contribute for significant morbidity, disability and even mortality amongst those affected. Due to the prevailing stigma, these disorders often are hidden by the society and consequently persons with mental disorders lead a poor quality of life.

Even though several studies point to the growing burden, the extent, pattern and outcome of these mental, behavioural and substance use disorders are not clearly known. Though unmeasured, the social and economic impact of these conditions is huge. It is also acknowledged that mental health programmes and services need significant strengthening and / or scaling up to deliver appropriate and comprehensive services for the millions across the country who are in need of care.

India recently announced its mental health policy and an action plan; these along with the proposed mental health bill attempts to address the gaps in mental health care. In addition, recommendations from National Human Rights Commission and directives from the Supreme Court of India have accelerated the pace of implementation of mental health services. Several advocacy groups, including media, have highlighted need for scaling up services and providing comprehensive mental health care.

To further strengthen mental health programmes and develop data driven programmes, the Ministry of Health and Family Welfare, Government of India commissioned NIMHANS to plan and undertake a national survey to develop data on prevalence, pattern and outcomes for mental disorders in the country. Furthermore, a systematic assessment of resources and services that are available to meet the current demands was a felt need.

Thus, the National Mental Health Survey was undertaken by NIMHANS to fulfil these objectives across 12 selected states of India during 2015 – 16. After making adequate preparations for nearly 12 months, the study was implemented on a nationally representative sample adopting a uniform and standard methodology. Data collection was undertaken by well-trained staff using hand held devices from 39,532 individuals across the states. Simultaneously, mental health systems assessment undertaken using secondary data sources and qualitative methods, set down indicators with the active engagement of stake holders.

The findings from NMHS 2015-16 are presented in two parts: the first part provides data on the prevalence, pattern and outcomes, while the second one reports the current status of mental health systems. These reports provide a detailed description of the need, focus, methods,

results, implications along with recommendations. The methods section would empower readers to understand the results and also guide other researchers to plan and implement large scale national surveys.

Robust and quality population data aid policy makers to formulate programmes and policies that meet the needs of citizens in various areas. NMHS 2015-16 reveals that nearly 15% of Indian adults (those above 18 years) are in need of active interventions for one or more mental health issues; Common mental disorders, severe mental disorders and substance use problems coexist and the middle age working populations are affected most; while mental health problems among both adolescents and elderly are of serious concern, urban metros are witnessing a growing burden of mental health problems. The disabilities and economic impact are omnious and affect, work, family and social life. However, to address these problems, the current mental health systems are weak, fragmented and uncoordinated with deficiencies in all components at the state level.

The National Mental Health Survey is a joint collaborative effort of nearly 500 professionals, comprising of researchers, state level administrators, data collection teams and others from the 12 states of India and has been coordinated and implemented by NIMHANS. The results and implications point to a need for a strong public health approach and a well-functioning mental health systems within larger health system. The response needs to be integrated, coordinated and effectively monitored to appropriately address the growing problem.

Our efforts will be amply rewarded, if, the political leadership at all levels - policy makers in health and related sectors - professionals from all disciplines - the print and visual media and importantly the Indian society acknowledge the huge burden of mental disorders in India and make strong attempts to intensify and scale-up mental health care services, integrate mental health promotion into care and management and also strengthen rehabilitation in health, social, economic and welfare policies and programmes. Undoubtedly, all these should be based on equity, promote a rights approach and enhance access. The country should join together towards 'Finding solutions together'

NMHS team

Our sincere gratitude to all the individuals and their family members across survyed states for all the cooperation in the conduct of National Mental Health Survey.

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- Ms. Sujaya Krishnan, former Jt. Secy, MoHFW
- Mr. Oma Nand Director (H), MoHFW
- Mr. Deepak Malhotra, Section Officer, MoHFW

We are immensely thankful to

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- Dr. Sekar Kasi, Registrar and Professor of Psychiatric Social Work, NIMHANS
- Dr. Ravi V, Former Registrar and Sr Professor of Virology, NIMHANS
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- Dr. David Sheehan, member, NTAG
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- Mr. Christopher Ray, President, Medical Outcomes Systems, Jacksonville, Florida, USA

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Abbreviations

ANM	Auxillary Nurse Mid-wife
AS	Assam
ASHA	Accredited Social Health Activist
CCHFW	Central Council of Health and Family Welfare
CG	Chattisgarh
CHC	Community Health Centre
CSO	Civil Society Organisation
CPH	Center for Public Helath.
DALYs	Disability Adjusted Life Years
DMHP	District Mental Health Programme
DMHSA	District Mental Health Systems Assessment
GJ	Gujarat
HMIS	Health Management Information System
ICMR	Indian Council for Medical Research
IEC	Information Education Communication
IEC	Institutional Ethics Committee
JH	Jharkhand
KL	Kerala
LMICs	Low and Middle Income Countries
MHSA	Mental Health System Assessment
MN	Manipur
MNSuDs	Mental, neurological and substance use disorders
MoHFW	Ministry of Health and Family Welfare
MP	Madhya Pradesh
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organizations
NHRC	National Human Rights Commission
NIMHANS	National Institute of Mental Health and Neuro Sciences
NMHP	National Mental Health Programme
NMHS	National Mental Health Survey
NMP	NMHS Master Protocol
NST	NMHS State Team
OG	Operational Guidelines
PB	Punjab
PHC	Primary Health Center
PHCR	Poverty Head Count Ratio
RJ	Rajasthan
SDG	Sustainable Development Goals
SMHSA	State Mental Health Systems Assessment
TN	Tamil Nadu
UP	Uttar Pradesh
USHA	Urban Social Health Activist
WB	West Bengal
WHO	World Health Organisation
WHO-AIMS	World Health Organisation Assessment Instrument for Mental Health Systems

Tables

Figures

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Executive Summary

Mental, Neurological and Substance use disorders (MNSUDs), currently included under the broader rubric of Non Communicable Diseases (NCDs) are increasingly recognised as major public health problems contributing for a greater share of morbidity and disability. During the last five decades, the prevalence, pattern, characteristics and determinants of various mental disorders has been examined by research studies. Furthermore, care related issues, service delivery aspects and system issues have been examined in a limited manner. However, scientific extrapolations and estimates to national and state level have not been possible. Recent studies indicate the emergence of several new problems like alcohol and drug abuse, depression, suicidal behaviours and others; information of these at a national level are limited.

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 National Institute of Mental Health and Neuro Sciences(NIMHANS) to undertake a National Mental Health Survey (NMHS) in a nationally representative population and examine priority mental disorders, estimate treatment gap, assess service utilization, disability and socio-economic impact along with assessing resources and systems.

The NMHS was undertaken in 12 states across 6 regions of India [North (Punjab and Uttar Pradesh); South (Tamil Nadu and Kerala); East (Jharkhand and West Bengal); West (Rajasthan and Gujarat); Central (Madhya Pradesh and Chhattisgarh) and North-east (Assam and Manipur)]. In each state, the dedicated team of Investigators included mental health and public health professionals.

Methods

A uniform and standardised methodology was adopted for the National Mental Health Survey.

- A pilot study was undertaken in the district of Kolar, the Public Health Observatory of NIMHANS
- The **Master Protocol** for the study was drafted based on the results from the pilot study and finalised after deliberations with the National Technical Advisory Group (NTAG) and the National Expert Panel and discussions with the state teams. A detailed **Operational Guidelines document** was developed to conduct the survey.
- NIMHANS Institutional Ethics Committee (IEC) approved the study protocol.
- The methodology adopted was multi-stage, stratified, random cluster sampling technique, with random selection based on Probability Proportionate to Size at each stage; all individuals 18 years and above in the selected households were interviewed. A sub-sample was included in four states to examine feasibility of methodology for understanding mental morbidity amongst adolescents (13 – 17 years).

- Both quantitative and qualitative methods were employed. A set of 10 instruments including Mini International Neuro-psychiatric Interview (M.I.N.I 6.0) were utilised.
- After a rigorous 8 week training and micro-planning effort, field data collectors undertook door to door interviews. The training was participatory and the different methods included class room sessions, training in the hospital (observation and demonstration of interviews), and training in the community (both supervised and independent) and hands-on training in data collection on tablets.
- Information was captured on handheld devices and strict protocols were established for data transfer and management with access controlled mechanisms.
- To ensure quality apart from rigorous training, weekly and fortnightly review and problem solving meeting were held both locally and with NIMHANS team.
- Data received from all states was examined for errors periodically and regularly and feedback provided to the state team during fortnightly e-reviews. More than 200 such e-meetings were held during the survey period.
- The weighted estimates for life time prevalence and current prevalence were derived for conditions included in the International Classification of Disease, 10th revision, Diagnostic Criteria for Research (ICD 10 DCR).

Results

ICD-10 DCR Prevalence (%) of Mental morbidity among adults 18+ years		
(n = 34802)	**Lifetime**	**Current**
F10-F19 - Mental and behavioral problems due to psychoactive substance use	**22.4**	
F10 Alcohol use disorder	4.7	
F11-19, except 17 Other substance use disorder	0.6	
F17 Tobacco use disorders	20.9	
F20 –F29 Schizophrenia, other psychotic disorders	**1.4**	**0.4**
F30-F39 Mood (Affective) disorders	**5.6**	**2.8**
F30-31 Bipolar Affective Disorders*	0.5	0.3
F32-33 Depressive Disorder	5.3	2.7
F40-F48 Neurotic & stress related disorders	**3.7**	**3.5**
F40 Phobic anxiety disorders**	1.9	
F41 Other anxiety disorders***	1.3	1.2
F42 Obsessive Compulsive Disorder	0.8	
F43.1 PTSD	0.2	

** Includes Single mania and hypomania episodes; ** Includes Agorophobia and Social phobia; *** Includes Panic disorder and Generalised anxiety Disorder*

- NMHS 2015-16 interviewed 39,532 individuals across 720 clusters from 80 talukas in 43 districts of the 12 selected states.
- The response rate was 91.9% at households level and 88.0% at individual level.
- Across the states, the population interviewed were similar to the state population characteristics and also representative of the country as per Census 2011.
- The overall weighted prevalence for any mental morbidity was 13.7% lifetime and 10.6% current. Table provides the weighted prevalence rates for individual disorders.
- The age group between 40 to 49 years were predominantly affected (Psychotic disorders, Bipolar Affective Disorders (BPAD), Depressive disorders and Neurotic and stress related disorders. The prevalence of Substance Use Disorders (SUDs) was highest in the 50-59 age group (29.4%)
- The gender prevalence of psychotic disorders was near similar (life-time: M:1.5%; F: 1.3%; Current M: 0.5%; F: 0.4%). While, there was a male predominance in Alcohol Use Disorders (9.1% v/s 0.5%) and for BPAD (0.6% v/s 0.4%), a female predominance was observed for depressive disorders (both current (F:3.0%; M: 2.4%) and life-time (F: 5.7%; M: 4.8%) for neurotic and stress related disorders.
- Residents from urban metro had a greater prevalence across the different disorders.
- Persons from lower income quintiles were observed to have a greater prevalence of one or more mental disorders.
- An individual's risk of suicide in the past one month was observed to be 0.9% (high risk) and 0.7% (moderate risk); it was highest in the 40-49 year age group, greater amongst females and those from urban metros.
- Intellectual Disability (ID) screener positivity rates was 0.6% and epilepsy screener positivity rate was 0.3% [Generalised Tonic Clonic Seizures (GTCS only)]; It was greater amongst the younger age group, among males and those from urban metro areas.
- The prevalence of morbidity amongst adolescents was 7.3% with a similar distribution between males and females (M: 7.5%; F:7.1%), but was higher in urban metro areas. Current prevalence of anxiety disorders was 3.6%, and Depressive disorders was 0.8%.
- Treatment gap for mental disorders ranged between 70 to 92% for different disorders: common mental disorder - 85.0%; severe mental disorder - 73.6%; psychosis - 75.5%; bipolar affective disorder - 70.4%; alcohol use disorder - 86.3%; tobacco use - 91.8%
- The median duration for seeking care from the time of the onset of symptoms varied from 2.5 months for depressive disorder to 12 months for epilepsy. In majority of the cases, a government facility was the commonest source of care.
- At least half of those with a mental disorder reported disability in all three domains of work, social and family life and was relatively less among alcohol use disorder. Greater disability was reported among persons with epilepsy, depression and BPAD.
- The median amount spent for care and treatment varied between disorders: alcohol use disorder: ₹ 2250; schizophrenia and other psychotic disorders: ₹ 1000; depressive disorder: ₹ 1500; neurosis; ₹ 1500; epilepsy: ₹ 1500.

Recommendations

The organisation and delivery of comprehensive and integrated mental health services in India that is socio-culturally and politically diverse and economically stratified is indeed a challenging task for policy makers ; but is definitely required. In recent times, the Mental Health Policy, the new Mental Health Bill, judicial directives, National Human Rights Commission initiatives and advocacy actions aim at improving the scenario and undeniably are the right steps in this direction.

It is well acknowledged that there is no single solution that gives complete and / or quick results. Several components and activities need to be integrated into the larger existing systems, new actions need to be promoted and implementation stringently followed. Building strong health systems that integrate mental health with the larger public health system based on evidence backed practices is the need of the hour.

Data driven policies and programmes play a key role in this process. The National Mental Health Survey, 2016, conducted across 12 states with uniform and standardised methodologies and unique strategy of combining prevalence, health seeking and systems analysis attempts to provides the stimulus to develop a roadmap for mental health services.

An estimated 150 million persons are in need of mental health interventions and care (both short term and long term) and considering the far reaching impact of mental health (on all domains of life), in all populations (from children to elderly), in both genders, as well as in urban and rural populations, urgent actions are required. Considering the burden among children and adolescents (not included in this survey), thousands more are in need of care.

This huge burden of mental, behavioural and substance use disorders, in India, calls for immediate attention of political leaders, policy makers, health professionals, opinion-makers and society at large. It is hoped that the data from the NMHS will inform mental health policy and legislation and help shape mental health care delivery systems in the country. Most significantly, mental health should be given higher priority in the developmental agenda of India. All policies and programmes in health and all related sectors of welfare, education, employment and other programmes need to include and integrate mental health in their respective policies, plans and programmes.

Based on the study results of this report and the accompanying report, interactions with stake holders, views of community respondents and a review of past lessons to improve mental health systems in India, the following recommendations are placed herewith.

1. The existing National Mental Health Programme, and its key implementation arm the District Mental Health programme (DMHP), needs significant strengthening. In consultation between central and state stakeholders, there is an urgent need for formulating explicit written action plans, increasing compliance towards implementation by supportive supervision, enhancing mechanisms of integration, developing dedicated - ring fenced

financing, devising mechanisms for accelerating human resources, improving drug delivery and logistics mechanisms and devising effective monitoring frameworks, so as to provide the widest possible coverage to affected citizens.

2. Broad-basing of priorities and planning of services to address the triple burden of common mental disorders, substance use disorders and severe mental disorders is required through focused as well as integrated approaches.

   - Mental health should be integrated with programmes of NCD prevention and control, child health, adolescent health, elderly health and other national disease control programmes. Specific programme implementation strategies and guidelines should be provided to all state governments in relation to activities, programmes, human resources, funding as well as monitoring.
   - In particular, in all these programmes, screening for common mental disorders (depression, suicidal behaviours, substance use problems, etc.,), health promotion (through yoga and other methods) and continuity of care / referral services should be an integral component.
   - In addition, existing platforms of educational institutions and work places should be strengthened to include mental health agenda. Such programmes should first be initiated in DMHP sites based on the experiences of pilot studies and expanded in the next phase.

3. All Indian states should be supported to develop and implement a focused "Biennial mental health action plan" (covering severe mental disorders, common mental disorders and substance use problems) that includes specified and defined activity components, financial provisions, strengthening of the required facilities, human resources and drug logistics in a time bound manner. It should include implementing legislations, coordinated Information Education Communication (IEC) activities, health promotion measures, rehabilitation and other activities. These action plans should indicate responsible agencies or units for each defined activity component, their budget requirements and time lines of implementation along with monitoring indicators. Monitoring and evaluation should be an inbuilt component of this action plan and could be revised once in five years to measure progress.

4. Capacity strengthening of all policy makers in health and related sectors (education, welfare, urban and rural development, transport, etc.,) at the national and state levels should be given priority. Furthermore, human resource development for mental health in health and all related sectors should be systematically planned and implemented over the next 5 years. Based on their roles and responsibilities, these strategies should focus on (i) sensitisation of policy makers and professionals in health, education, welfare, women and child development, law, police and others, (ii) training all existing and new state mental health programme officers in programme implementation, (ii) training all district mental health programme officers in programme implementation, (iv) building skills and knowledge of doctors (modern and traditional), health workers, ANMs, ASHAs and USHAs, Anganwadi workers and others.

- The DMHP is the key implementation arm of the NMHP, currently led by a psychiatrist or a medical doctor trained in mental health. Strengthening the knowledge and skills of DMHP officers in each state should move beyond diagnosis and drugs towards acquiring skills in programme implementation,monitoring and evaluation. Training in leadership qualities as required at the district level are essential.

5. Human resource development at all levels requires creating mechanisms by identifying training institutions – trainers – resources – schedules– financing at the state level.
   - In all human resource activities, creating virtual internet based learning mechanisms to successfully train and hand-hold all non-specialist health providers' needs expansion; this can achieve the task shifting to non-specialists or other disciplines of medical care.
   - Technology based applications for near-to-home-based care using smart-phone by health workers, evidence-based (electronic) clinical decision support systems for adopting minimum levels of care by doctors, creating systems for longitudinal follow-up of affected persons to ensure continued care through electronic databases and registers can greatly help in this direction. To facilitate this, convergence with other flagship schemes such as Digital India needs to be explored.
   - The existing Centers of Excellence, mental hospitals, NIMHANS, medical college psychiatry units or state training institutes should be given the responsibility of developing the requisite training calendar / programmes.
6. Minimum package of interventions in the areas of mental health promotion, care and rehabilitation that can be implemented at medical colleges, district and sub-district hospitals, and primary health care settings should be developed in consultation with state governments and concerned departments and an action plan formulated for its implementation in a phased manner.
   - Focused programmes need to be developed and / or the existing programmes strengthened in the areas of child mental health, adolescent mental health, geriatric mental health, de-addiction services, suicide and violence prevention and disaster management. This should start with state level and subsequently extended to the district level.
   - These activities should be developed initially within DMHP programme and expanded to non-DMHP programmes, scaled up as mental health extension-outreach activities within their districts with the involvement of local medical college psychiatry units and district hospitals. Inaccessible areas and underprivileged communities should be given priority.
7. Upgradation of existing facilities to treat and rehabilitate persons with mental illness will require further strengthening of existing mental hospitals as mandated by the National Human Rights Commission and provided by other previous schemes of the Health ministry. This will require the creation of an accessible stepped care system of mental health care in mental hospitals, district hospitals and medical colleges (in both public and private sector) in addition to existing public systems of care, recognizing that at present more than 85% of medical care occurs in the private non-governmental sphere.

8. Drug logistics system at state level needs strengthening in indenting, procurement at state and local levels, distribution and ensuring availability on a continuous and uninterrupted basis in all public sector health facilities. The important issue of ensuring last-mile availability of the drug logistics system needs greater attention in planning and budgeting, and should be embedded in the state mental health action plans.

9. The funding for mental health programmes needs to be streamlined with good planning, increased allocation, performance based timely disbursal, guaranteed complete utilisation and robust mechanisms for oversight and accountability. There is a need for greater apportioning in the NCD flexi pool budget and the necessary mechanisms for dedicated funding for mental health within both the central and state health budgets should be included in national and state level plans. (Ring-fenced budgeting)

   Furthermore, the economic impediments to health seeking by people needs serious attention as treatment for mental health disorders is impoverishing the families and communities. To ameliorate the problems of access among the affected due to economic disparity, mechanisms such as access to transport, direct payments, payment vouchers for economically backward sections, health insurance and other schemes need to be explored. Steps to develop actuarial data on mental disorders will help private insurance companies to provide coverage for mental disorders.

10. A National registry of service providers from different disciplines (psychiatrists, psychologists, social workers, public and private mental health facilities in the area which also includes all other resources), which is periodically updated through systematic geo mapping at the state level will encourage greater participation of public and private health care providers and promote long term mental health care. This will also benefit local communities in healthcare seeking. While, this is incorporated in the new mental health bill, it requires an agency to be designated for the purpose.

11. Rehabilitation, to remedy long-standing disabilities and multiple areas of negative impact suffered by affected individuals and their families requires critical attention.

    - Firstly, this requires establishing mechanisms for creating facilities and services at district and state levels (day care centers/ respite care, half way homes, etc.,) through organised approaches.
    - Secondly, it involves economic and social protection for the mentally ill through protected housing and social security / unemployment benefits for persons with SMDs (especially the wandering mentally ill), as well as protection from discrimination and neglect.
    - Thirdly, it requires the provision of facilities for re-skilling, protected employment for persons with mental illness, provision of loans or micro-finance schemes for the affected and their family members. Convergence with other flagship schemes of the government such as Skill India needs to be explored._
    - Legal, social and economic protection for persons with mental illness should be ensured through existing legislative provisions (eg: Mental Health Care Bill) and state specific

legislations to guarantee mental health care to citizens should be strictly implemented. The provisions under these instruments need to be widely disseminated; people should be made aware of their rights and delivery channels strengthened. Side by side, effors should be made to empower the National Human Rights Commission, Right To Information act, citizen's advocacy groups, self-help groups of mentally ill, civil society organisations to bring in greater accountability in these activities.

12. With a high prevalence of mental disorders in urban areas and with growing urbanisation, the urban health component under the National Health Mission should have a clearly defined and integrated mental health component for implementation of services (defined services in identified institutions).

    Similarly, mental health in work places and educational institutions using life skills techniques can aim at health promotion, early detection as well as awareness programmes on mental health (for common mental disorders like depression, anxiety, stress reduction, alcohol and tobacco use, etc.,) and should be promoted at all levels; development of programme implementation guidelines, mechanisms and resources are critical requirments.

13. A National Mental Health literacy (including IEC) strategy and plan of implementation should be developed to strengthen and focus on health promotion, early recognition, care-support – rights of the mentally ill and destigmatisation.

    - IEC activities should move towards creating opportunities for better care, employment, educational and income generation activities for persons with mental disorders.
    - Advocacy for mental health with the active engagement of the media is critical to develop programmes for the advancement of mental health. While negative portrayal needs to be stopped, positive portrayal on creating opportunities, rights and opportunities, recovery aspects need more coverage.
    - Integrating mental health and substance use disorder within the ambit of governmental and non-governmental schemes on social and economic development (e.g. woman and child, micro-finance etc) will broad base coverage as well as reduce stigma.
    - Civil society organisations, professional bodies and the private sector should take a lead role in these activities.

14. All mental health activities, programmes, plans and strategies should be scientifically and continuously monitored at the national, state and district levels. A mental health monitoring framework with clearly defined processes, indicators and feedback mechanisms should be developed and evaluated at periodical intervals.

    - All DMHP activities should be reviewed by the District Collector or equivalent (once a month) and state level activities should be reviewed by the Principal Secretary Health (at 6 monthly intervals).
    - A select set of indicators should be finalised and standardised for uniform data collection and monitoring to measure service delivery components through routine systems
    - Sample surveys on representative populations at should be undertaken at defined intervals to independently measure status and progress.

- As evaluation is critical in measuring the outcomes and impact, mental health programmes should be evaluated by external agencies every 5 years.

15. The research base in mental health should be strengthened with a focus on the following areas
    - Prioritised mental health questions should be included in the regular ongoing national surveys like NCD risk factor survey, National Family and Health Survey, National Sample Survey Organisation (NSSO) and others.
    - Delineating the burden and impact of mental and substance use disorders in primary care settings using uniform and standardised techniques.
    - Operational research focusing on programme pitfalls and achievements, barriers and challenges, integration mechanisms and coordination challenges.
    - Expanding the present survey on adolescents in the 13 – 17 years group (implemented as a pilot study) to larger populations.
    - Understanding the treatment gap to unfurl macro and micro level issues from both demand and supply angles.
    - Identifying risk and protective factors involved in causation, recovery and outcome of different mental disorders.
    - Understanding cultural perceptions and beliefs with regard to mental health for increasing the utilisation of mental health services.
    - Use of m-health and e-health to develop services, databases, registries, distant care and promote convergence with other programmes.
    - Comprehensive understanding of the rehabilitation needs of the mentally ill at the district and state levels along with a longitudinal follow-up of affected individuals.
    - Better understanding of the economic impact of mental health disorders that include both direct and indirect costs.
    - Evaluating the different strategies for mental health promotion
    - National agencies like Indian Council for Medical Research (ICMR), Indian Council of Social Science Research (ICSSR), Department of Biotechnology (DBT), Department Of Science & Technology (DST), private sector and international agencies like World Health Organisation (WHO) and other United Nations (UN) agencies should dedicate and enhance research funds for mental and substance use disorders.

A National Empowered Commission on Mental Health, comprising of professionals from mental health, public health, social sciences, the judiciary and related backgrounds should be constituted to oversee, support, facilitate, monitor and review mental health policies – plans – programmes in a continuous manner. Such a task force that works closely with the Ministries of Health at the national and state levels can provide strategic directions for mental health care programming to ensure speedy implementation of programmes.

1. Introduction

A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health. This includes efforts to influence determinants of health as well as more direct health-improving activities.

A health system is therefore more than the pyramid of publicly owned facilities that deliver personal health services. It includes, for example, a mother caring for a sick child at home; private providers; behaviour change programmes; vector-control campaigns; health insurance organizations; occupational health and safety legislation. It includes inter-sectoral action by health staff, for example, encouraging the ministry of education to promote female education, a well known determinant of better health.

World Health Organization, 2007(1)

A well-coordinated, balanced and efficient health system is central to the delivery of health care to people. A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health(2). Among the several goals of health systems, the most important goal focuses on improving health and bringing health equity, in ways that are responsive, financially fair, and make the most efficient use of the available resources by achieving greater access and coverage for effective health interventions, without compromising efforts to ensure provider quality and safety. To achieve this goal for improved outcomes, it is essential that the health system is strengthened and made responsive to changing health priorities and concerns (1,2).

The World Health Orgnisation has identified six health system building blocks for defining and strengthening health systems(3). These six building blocks include health services, health workforce, health information systems, medical products/vaccines and technologies, health financing, leadership and governance (Figure 1). These blocks represent a set of inter-connected areas that must function together to be effective. Changes in one area will have repercussions elsewhere and improvements in one area cannot be achieved without contributions from the others. Thus, improving these six health system building blocks and managing their interactions in ways that achieve more

Figure 1: Health system building blocks

Source: WHO

equitable and sustained improvements across health services is the primary goal of health policy makers and programme managers.

1.1 Systems approach to mental health

The maxim, "there is no health without mental health"(4) underlines the fact that mental health is an integral and essential component of health. Mental health services and systems in most parts of the world are far from satisfactory and India is no exception. Despite years of research and a continued focus to improve health systems, changes seen in the mental health field are few and limited. For example, the treatment gap associated with mental health is very large in most countries, especially Low and Middle Income countries (LMICs)(5). The reasons for this are several and range from availability to affordability and are influenced by several factors.

The causes and consequences of mental health problems are highly complex and need to be addressed across the system rather than in isolation. There are minimal efforts and resources spent on promotive and rehabilitative services that are critical to mental health. Furthermore, inequities in health and mental health in particular are large in every society. These issues necessitate the use of a broader understanding of the health systems approach in the delivery of mental health services for improved health outcomes.

The systems approach identifies the areas in mental health where each system succeeds, where it breaks down, and what kinds of integrated approaches will strengthen the overall system. Thus, a systems approach to mental health will enable policy makers to device a frame work that will deliver high-quality mental health services to close the mental health- treatment gap and strengthen preventive / promotive measures along with rehabilitation services

This approach will also provide an established framework to deliver a package of interventions for the delivery of mental health services. Furthermore, it will help in understanding and tackling the complexity of mental health problems and their risk factors. In addition, it will open paths for identifying and resolving health system challenges that prevent the smooth delivery of mental health services. This will result in the successful implementation of both simple and complex mental health interventions in real-world settings which are crucial for improved mental health and health

Mental, neurological and substance use disorders (MNSuDs) known to be on the increase in recent years, include a wide variety of conditions ranging from minor anxiety related conditions to severe conditions like Schizophrenia and Bipolar disorders. Globally, these conditions contribute for 25871 (in thousands) DALYs (10.4% of total DALYs)(6). Further, many MNSUDs are both a cause and consequence of Non-Communicable Diseases (NCDs). The National Mental Health Survey (NMHS), undertaken across 12 states revealed that an estimated 10.7% of adults (above 18 years) and 7.3% of adolescents (13 – 17 years) are suffering from mental disorders in India. Most significantly, NMHS revealed that nearly 80% of those affected had not received any type of care after the onset of their illness. The disabilities associated with these conditions were severe in nearly 0.7% to 28.2% of persons along with significant socioeconomic impact on those who are affected.

outcomes. Thus, in the present context, a systems approach to mental health becomes critical not only to advance mental health but will also have implications on the nation's achievement of Sustainable Developmental Goals (SDGs) (7). (Refer to Box 1 for details)

1.2 Mental health systems

A mental health system represents a means by which effective interventions for mental health are delivered. It characterises the nature, extent and quality of mental health care services in a country. A mental health system encompasses all organizations and resources with a set of interconnected elements and activities that are focused on promoting, restoring, or maintaining mental health(8).

Figure 2: Key Components of mental health system

The key components of a mental health system are: policy and legislative framework, community mental health services, mental health in primary health care, human resources, public education, links with other sectors, and monitoring and research (9). These components/domains are interdependent, conceptually linked, and somewhat overlapping. Understanding and addressing these relationships will be crucial in strengthening the mental health system in India.

1. **Policy and legislative framework** covers mental health policy, mental health plan, mental health legislation, monitoring and training on human rights and financing of mental health services.
2. **Mental health services** cover organizational integration of mental health services, mental health outpatient facilities, day treatment facilities, community-based psychiatric inpatient units, community residential facilities, mental hospitals and other residential facilities. It also deals with the availability of psychosocial treatment in mental health facilities, ensures the continuous and uninterrupted supply of essential psychotropic medicines and equity of access to mental health services.
3. **Mental health in primary health care** covers the areas of physician-based primary health care, non-physician-based primary health care interaction with complementary/alternative/traditional practitioners.
4. **Human resources** include the number of people, training for professionals and para/allied professionals in mental health, user/consumer and family associations, activities of consumer associations, family associations and other Non Governmental Orgnisations (NGOs).
5. **Public education and link with other sectors** focuses on public education and awareness campaigns on mental health, links with other sectors, formal and informal collaboration with other sectors and each other's activities.

6. **Monitoring and evaluation** through formal or informal research activities focus on monitoring mental health services, policies and programmes

A mental health system requires forethought and planning at all levels long before a policy maker or professional or mental health worker engages in service delivery activities for a defined population in a given geographical area. *A good mental health system is important for providing mental health services to all who need them, in an equitable way, in the most effective manner possible, and in a method that promotes human rights and health outcomes. Thus, a mental health system has the responsibility of reducing the substantial burden of untreated mental disorders, reducing human rights violations, ensuring social protection and improving the quality of life especially of the most vulnerable and marginalised subgroups in a society.*

To achieve this as well as to ensure the prominence of mental health in health care, it is important to understand the current mental health system: its policies, plans, legislation, resources, activities as well as mechanisms that govern these components to ensure that mental health is given its rightful prominence in health care. It is also essential to ensure that the mental health system receives sustainable financing and supports the availability and efficient use of psychotropic medications along with other supportive preventive / promotive and rehabilitation services for mental health care.

As no single service setting can meet all population mental health needs, it has been emphasised that a mental health system that integrates mental health services into primary health care with linkages to secondary care, informal and community-based services would form the basis for the delivery of high-quality mental health care (8). With the availability of cost-effective and feasible mental health interventions, there exists an immense scope to strengthen the mental health care systems to reduce the burden of mental disorders especially in resource limited settings. Nevertheless, this requires concerted and focused policies, planning, and service development, as well as implementation.

1.3 Role and scope of mental health systems

A systems perspective for mental health provides a broader framework for health care delivery, serves better integration of the already available services and thus improves the uptake of care for those with mental health problems.

Globally, despite the huge burden of mental illness and the availability of effective interventions, mental health is often accorded a low priority with the situation being abysmal in many LMICs (10). Within the existing health systems, minimal research and lack of resources have contributed to limited understanding and minimal investment in mental health care at the national level(11). Many countries face acute shortage of mental health professionals and fewer than 28% of countries have a specific budget for mental health care(10). Data from the WHO Mental Health Atlas 2014 indicated the scarcity of resources within countries to meet mental health needs, and highlighted the inequitable distribution and inefficient use of existing resources(12). Worryingly, many mental health systems still rely on institutional care in psychiatric hospitals, despite these having been discredited on humanitarian grounds as well as becoming

limited in scope with the advent of new psychotropic medications, rehabilitation programmes and community care(13).

The lack of a comprehensive and integrated systems approach to mental health care, results in poorly functioning or absent mental health systems. The consequent inefficiencies, service gaps, and compromised mental health outcomes limits the health systems' response to manage the burden of mental disorders adequately. There is a huge gap between the need for treatment and its provision, all over the world. In LMICs, nearly 76% - 85% of people with severe mental disorders received no treatment for their problems, while surprisingly 35% -50% even in high- income countries had not received treatment. Among those who had received treatment, the problem was further compounded by the poor quality of care(12). Without satisfactory quality in mental health care, people with mental disorders, their families, and the general public become disillusioned with mental health treatment and care. Lack of focus on quality also results in resources being wasted.

Thus, a good mental health system broadly integrated into the larger national and regional health systems, plays a key role in delivering effective, safe, and high-quality care to those who need it, when they need it and with minimal waste. Focus on quality helps to build trust in the effectiveness of the system, overcomes barriers for appropriate care and ensures maximum effectiveness with the efficient use of available resources.

Public health approaches and their several components within health systems, and mental health systems in particular, contribute towards the effective functioning of the system. These include identified governance and structure, a well-articulated policy, strategic action plan(s), implementation of targeted and defined programmes, supportive structures, resource allocation and development. Prioritization of activities, well established coordination mechanisms between the centre and the state, steps to engaging the community and civil society, reporting and monitoring of frameworks and evaluation plans are absolute necessities. In reality, all these components make a public health framework and will essentially lead to a systems approach.

Specifically, for India, the limited reach and slow expansion of mental health programmes and services can be broadly attributed to the lack of an efficient public health framework and inadequate and poorly developed systems for mental health care. While the need for planning, program development and implementation based on good quality data is often reiterated, the public health and a systems perspective of services and resources has been totally missing.

In view of the need for a systems approach and one built on a larger public health framework, a good understanding of the current level of the mental health system in India is necessary. This will provide a clearer and more comprehensive picture of the major weaknesses as also essential information for planning and strengthening mental health services along with identifying the areas of integration within the existing system to improve mental health care. Undoubtedly, a well-planned and organised mental health system has immense scope for enhanced service delivery, positive outcomes and improved human rights for people with mental disorders.

2. Mental health systems in India

Traditionally and for too long, mental health has been a neglected area in India's health system and a detailed description of the reasons for the same are beyond the scope of this report. It is also well recognized that health systems in India are weak and fragmented even though this scenario has begun to change in recent years(14). Despite a growing knowledge of its relevance and importance, the neglect of mental health over years and at all levels has resulted in an absent or limited health systems presence. The traditional mental hospitals and asylums continue to play a bigger role even today and integrated systems are found lacking. At the same time, globally, many innovative and integrated solutions are being explored and results have been promising. Nevertheless, with successive five year plans and a National Mental Health Programme, mental health initiatives are definitely growing, both in quantity and quality, albeit at a slow pace. A major facet of this growth is still the absence of an integrated and coordinated systems approach. This scenario needs to change.

Innovations lead the way.... Gujarat
Dava & Dua

Several studies in India, including the most recent National Mental Health Survey has shown that spiritual and traditional healers are often the first contact of care for mental illness in India. Several merits and demerits lie in this approach.

Integration of religious and faith based practices with modern mental health care interventions in religious and traditional healing places can immensely help communities; such a programme was started in 2007 in Gujarat state of India at the Holy Shrine of Mira Datar Dargah in the district of Mahesana.

The activities undertaken included-establishing linkage system between health professionals and mujavar's (local healers); educating mujavar's on mental health, mental illness, its signs and symptoms; providing free mental health services to those suffering from psychological problems visiting the Dargah; referral of patients for medical treatment and creating awareness on mental health issues in nearby communities. The chain of care activities ensured continuity of care.

The programme funded by the Department of Health and Family Welfare with guidance and monitoring by Hospital for Mental Health, Ahmedabad is considered successful as mental health services are available along with beneficial and harmless traditional health practices.

The National Human Rights Commission has commented that this is an ideal community mental health program which can be replicated at other religious places within the country. Consequently, till date, nearly 376 faith healers have been trained on identification of mental health problems and more than 40,000 persons with mental illnesses from 12 states have received treatment with 60% of follow-up rate at 3 months. Faith healers refer an average of 10 patients per month; chaining of the persons with mental illnesses has stopped and there is an improved awareness regarding mental health in the communities.

2.1 National and District Mental Heatlh Programme: Origin, Progress and Status

India was one of the first countries in the developing world to formulate a National Mental Health Programme. As early as 1982, the Central Council of Health and Family Welfare (CCHFW) adopted and recommended the implementation of a National Mental Health Programme for India (NMHP) (15). Earlier, studies from some parts of the country had highlighted the burden of mental health problems and also demonstrated the feasibility of delivering integrated services. Some major research and policy efforts that contributed to the drafting of the NMHP for India during the early 1980s included the following

1. "The organization of mental health services in developing countries" – a set of recommendations by an expert committee of the WHO.
2. Starting of a specially designated "Community Mental Health Unit" at the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore – 1975.
3. The WHO Multi-country project: "Strategies for extending mental health services into the community" (1976-1981)
4. The "Declaration of Alma Ata"- to achieve "Health for All by 2000" by universal provision of primary health care (1978)
5. Indian Council of Medical Research (ICMR) – Department of Science and Technology (ICMR-DST) Collaborative project on 'Severe Mental Morbidity (1987)'

The draft of the NMHP was written by an expert drafting committee (consisting of some of the leading senior psychiatrists in India) (16). During 1981-82, this draft was reviewed and revised in two national workshops attended by a large number of mental health professionals and other stakeholders. These recommendations were finally adopted by the CCHFW in August 1982.

The objectives of the NMHP were set out to:

1. Ensure the availability and accessibility of minimum mental healthcare for all in the foreseeable future, particularly to the most vulnerable and underprivileged sections of the population;
2. Encourage the application of mental health knowledge in general health care and in social development; and
3. Promote community participation in mental health service development and to stimulate efforts towards self- help in the community.

The adoption of the NMHP document in 1982 by the CCHFW (and the recommendation of its implementation) was a significant achievement in itself. However, the implementation of the programme over the years has faced numerous challenges. Most importantly, miniscule budgetary provisions were made for the implementation of the programme in the early days. There was lack of clarity regarding who should fund the programme – the federal government of India or the state governments, the latter perpetually having inadequate funds for health care. Although the draft of the programme was discussed in great detail by mental health professionals and revised before its final adoption by the CCHFW, there was a very lukewarm response and in some instances, almost rejection of the programme by fellow

professionals. Great doubts were expressed about the feasibility of implementing the programme in larger populations and in real world settings as almost all the pilot and feasibility projects were carried out only by research and training institutes and in smaller populations of up to 40, 000. There were many important concerns like, whether results obtained by 'highly motivated' personnel in a small population could be replicated in ordinary health care settings? Could the experiences from a population of 40,000 be extrapolated to a larger population (15 to 20 lakhs) of an administrative unit like a district?(15) Most significantly, the programme since the early days and up till the present, did not have a clearly articulated policy, governance or structure. There were no action plans or defined programmes including the critical need of engaging the community. While resource allocation and / or resource development was poor, supportive structures were either non-existent or where available, they were inadequate. All this indicated a lack of prioritisation of activities and was further compounded by an absence of coordination mechanisms between the centre and the state and between reporting and monitoring frameworks and evaluation plans. In reality, all these components make a public health framework and should essentially lead to a systems approach.

In the early days after adoption of the NMHP, there was a realization that the NMHP was not likely to be implemented on a larger scale without a demonstration of its feasibility in larger populations. The Raipur Rani experience(17) and the experience drawn from the activities of the Community Mental Health Unit at the then NIMHANS (15) paved the way for developing a programme to operationalise and implement the NMHP in a district. Bellary district with a population of about 2million, located about 350 kms away from Bangalore was chosen for the pilot development of a district level mental health programme.

The "Bellary model"(18,19,20) was the first community mental health initiative undertaken at the district level in India. This project was undertaken with the active support of the Directorate of Health and Family Welfare services, the Government of Karnataka and the Bellary District administration. The project was formalised in 1984 and aimed at extending mental health services to severely mentally ill persons in the district through existing health care personnel and institutions. The specific objectives included (1) decentralised training programme in mental health for all categories of health personnel, (2) provision of essential drugs for severely mentally ill persons at peripheral health care institutions, (3) developing a system of simple recording and reporting by health care personnel, (4) monitoring the effect of the service programme in terms of treatment utilisation and treatment outcome, (5) community participation in the provision of mental health care, and (6) studying the cost-effectiveness of the programme.

In brief, under the Bellary model, medical officers and health workers from all the primary health centres in the district were trained in mental health care in a staggered and decentralised manner. They were supported, supervised and provided with additional training whenever needed. Besides the training of all primary health care staff, the following components were added to the District Mental Health Programme (DMHP) at Bellary: provision of 6 essential psychotropic and anti-epileptic drugs (chlorpromazine, amitriptyline, trihexyphenidyl, injection fluphenazine

deaconate, phenobarbitone and diphenyl hydantoin) at all primary health centres and sub centres, a system of simple mental health care records, a system of monthly reporting, regular monitoring and feedback from the district level mental health team.

At the district headquarters, the mental health team consisting of a psychiatrist, clinical psychologist, a psychiatric social worker and a statistical clerk was formed. The psychiatrist ran a mental health clinic at the district hospital to review patients referred from the primary health centres and could admit up to 10 patients at the district hospital for brief in-patient treatment, if and when necessary. The district health officer reviewed the mental health programme every month at the district level during the monthly meeting of Primary Health Centre (PHC) medical officers. The model demonstrated the feasibility of delivering basic mental health care at the district, taluka and primary health centre levels by trained primary health centre workers.

The Bellary model demonstrated that primary health centre doctors and workers could be trained and supervised to identify and manage certain types of mental disorders as well as epilepsy along with their routine work at the primary health centres. Thus, the DMHP was launched in the year 1996 (in IX Five Year Plans) in 4 districts under the NMHP. This initiative began 14 years (1982 to 1996) after the CCHFW had approved the NMHP. The DMHP was implemented as a "fully centrally supported" project with a dedicated budget under the NMHP.The DMHP based on the 'Bellary Model' had the following components:

1. Early detection & treatment.
2. Training general physicians through short term training programmes for diagnosis and treatment of common mental illnesses with a limited number of drugs under the guidance of a specialist.
3. Training of health workers in identifying mentally ill persons.
4. Availability of a limited number of drugs within the district health system.
5. Public awareness activities.
6. Monitoring through simple record keeping

By the end of the 9thFive-year plan period, the DMHP was expanded to 27 districts of the country. During the X Five Year Plan (2002 to 2007), the NMHP was re-strategized with:

1. Extension of the DMHP to 100 districts
2. Upgradation of psychiatry wings of government medical colleges / general hospitals
3. Modernisation of state mental hospitals
4. Strengthening of IEC activities
5. Monitoring & evaluation

During the XI Five Year Plan (2007 to 2012), the NMHP was further strengthened and expanded to 123 districts of the country and it envisaged a community based approach to the problem. The salient features of the activities were:

1. Expansion and strengthening of the DMHP.
2. Manpower development schemes – Creating Centres of Excellence and setting up/ strengthening of post graduate training departments in mental health specialties. The training of a mental health team at identified nodal institutions.
3. Modernisation of state run mental hospitals

4. Upgradation of psychiatric wings of medical colleges /general hospitals
5. Expansion of Information Education Communication (IEC) activities to increase awareness & reduce stigma related to mental health problems.
6. Provision of services for early detection & treatment of mental illness in the community (Out Patient/ In Patient & follow up).
7. Training & research.
8. Monitoring & evaluation to provide valuable data & experience at the levels of the community, the state, & the centre for future planning & improvement in service & research.

2.2 Challenges in implementation of the NMHP

Several reviews by independent researchers and technical groups over time have highlighted that despite the presence of a national programme, the programme itself has not made much progress in coverage, completeness, reach and quality of mental health services in India(15,21,22). A variety of challenges have been reported in the implementation of the NMHP which include: i) absence of a full time dedicated programme officer for the NMHP in many states ii) challenges in coordination between centre and state and with health and non-health sectors (iii) difficulties in recruitment and retention of mental health professionals in the DMHP iv) inadequacies in the training of PHC personnel v) poor record maintenance vi) non-availability of basic information about patients undergoing treatment at various centres (regularity of treatment, outcome of treatment, drop-out rates etc.) vii) non-involvement of NGOs and the private sector viii) inadequate mental health educational and community awareness activities ix) absence of programme outcome indicators and monitoring x) inadequate technical support from mental health experts, and most importantly xi) limited availability or shortage of drugs, especially at peripheral levels despite the increase in budgetary allocation. As the primary focus of the NMHP was on rural areas, the need for decentralised mental health care in urban areas was also highlighted. Most doctors needed help in managing medically unexplained somatic symptoms, which their mental health training may not have provided them. Although there was a gain in knowledge, doctors were unable to manage patients with mental disorders on their own. There was a need for greater liaison with the district team (20).

While funding itself has not been a problem in recent times, delayed receipt of funds, irregular dispersal of funds, administrative blocks in the full utilisation of available funds and a variety of managerial issues have challenged the proper implementation of the NMHP across many states and Union Territories.

Drawing data from an 18-month clinical ethnographic study of the Kanpur DMHP in Uttar Pradesh, Jain and Jadhav(23) observed that the programme relies heavily on the pharmacological treatment of psychiatric disorders at the exclusion of community participation and psychosocial approaches. They contend that "psychotropic medication has become the embodiment of India's community mental health policy" and argue that "community psychiatry has, in practice, become an administrative psychiatry focused on effective distribution of psychotropic medication". Murthy RS (22) in a review,

pointed out that some of the barriers to the implementation of the NMHP included poor funding, limited undergraduate training in psychiatry, inadequate mental health human resources, limited number of models and their evaluation, uneven distribution of resources across states on the implementation of the Mental Health Act 1987, and privatisation of healthcare in the 1990s.

Over time, several reviews and evaluations have been undertaken to understand, identify issues and propose corrective steps for improving the NMHP. The summary of a few major ones are highlighted below.

2.2.1 Quality Assurance in Mental Health

The National Human Rights Commission (NHRC) in 1997, in collaboration with National Institute of Mental Health and Neuro Sciences (NIMHANS) under took a detailed evaluation of the status of mental health in the country under the Quality Assurance in Mental Health initiative(24). This included obtaining information on a pre-designed proforma from 37 mental hospitals throughout the country, personal visits to 33 mental hospitals, visits to 7 private psychiatric institutions and proforma information from 27 general hospital psychiatric units. The review of mental hospitals revealed that the physical infrastructure and living arrangements were inadequate in most hospitals. Patients' rights with respect to privacy and dignity were grossly violated. Hospitals did not have the adequate number of professional staff. Medical management was the mainstay of intervention, with psychosocial treatment almost absent. Policy makers, professionals and users were not aware of human rights related issues. On the whole, mental health care in mental hospitals was custodial rather than therapeutic.

2.2.2 National survey of Mental Health Resources

Pursuant to the orders of the Hon'ble Supreme Court in response to the tragedy at Erwady in the Ramanathapuram district of Tamil Nadu, a national survey of mental health resources, was carried out by the Directorate General of Health Services, Ministry of Health and Family Welfare from May to July, 2002 (25). The survey reported an alarming deficit of 77% for psychiatrists, 97% for clinical psychologists, and 90% for psychiatric social workers. The state of the mental hospitals surveyed was also not satisfactory.

Following the shocking incident of Erwady tragedy in the Ramanathapuram district of Tamil Nadu, the Supreme Court took suomoto notice of the incident and directed the Union of India to "conduct a survey on an all-India basis with a view to identify registered and unregistered 'asylums' as also about the state of facilities available in such 'asylums' for treating mentally challenged". The order of the Supreme Court in the Erwady case also included a mental health needs assessment in all states. It ordered that licenses be issued to private homes looking after the mentally ill, mandated a district monitoring committee for periodic inspection of the facilities, directed that destitute recovered mentally ill be admitted in government or non-government facilities. It strictly advocated that all the recommendations of the NHRC and SHRC be 'implemented scrupulously'.

AIR1979SC1369, 1979CriLJ1045, (1980)1SCC98, [1979]3SCR532

2.2.3 ICMR- Urban Mental Health Needs

A research evaluation using multiple research methods was carried out to study urban mental health care in 2002 in Delhi, Chennai and Lucknow(26). The evaluation indicated the uneven availability of mental health services and human resource deficits (especially non-medical mental health professionals) and huge treatment gaps in mental health care (82% to 96%). It was found that the average service load in the specialist mental health services was largely carried by the government sector (half to two thirds), followed by the private sector (one third to half), with only a small portion by the NGO sector. The average mental health service load in the primary care general health services was largely provided by the private sector with significant contributions from non-formal service providers. Barriers to service access included lack of awareness, stigma, financial difficulties, distance, negligence of service providers and lack of support. Lack of hygiene and long waits in government hospitals were cited as barriers in key informant interviews.

2.2.4 DMHP Audit by NIMHANS

An audit of the DMHP was carried out by NIMHANS in 2003 in 27 districts where the programme was started during 1996-2002 (27). It showed that there were numerous problems and bottlenecks in the actual implementation of the DMHP. The efficiency and the effectiveness of the programme varied widely between districts and states / union territories. A variety of factors such as the motivation and commitment of the nodal officer and the programme staff, interest and administrative support of the state health authorities (which included senior officers of the Directorate of Health Services, Directorate of Medical Education, the Principal of the Medical College, Head of the District Hospital. etc.) and absence of an effective central support and monitoring mechanism at the Government of India level contributed to the differential effectiveness. District mental health clinics and inpatient facilities for the mentally ill were established only in 15 of the 27 districts. In districts where the programme was functioning adequately, mental health services were decentralised to the district level (if not to the PHC level) and there was partial integration of mental health with general health services. Mental health services were started in many places where none existed earlier. While funds were not a major constraint, accessing the available funds posed enormous administrative and bureaucratic problems.

The audit highlighted the need to i) develop an operational manual for the DMHP ii) review the content, curriculum and method of training of PHC personnel iii) provide continued support, supervision and on-the-job training for PHC personnel after the initial training iv) review the priority conditions covered by the DMHP and make necessary amendments to include common mental disorders v) enhance IEC activities vi) monitor the programme regularly and develop time bound targets vii) incorporate aspects prevention and promotion of mental health such as life skills training and counselling in schools (27).

2.2.5 WHO-AIMs Report on the Mental Health System in Gujarat and Uttarakhand

In 2004, the WHO proposed and implemented WHO AIMS to evaluate the resources and systems for mental health. In 2005, a study

of mental health systems in Gujarat (28) and Uttarakhand (29) revealed that with the exception of some improvement in the availability of psychiatrists in Gujarat, the availability of other human resources had not improved in either of the two states since 2002. The report revealed that both the states lagged behind most of the developing countries in key indicators. The report highlighted the absence of policy and related support systems in the state of Uttarakhand.

2.2.6 Review by Indian Council for Marketing Research

One of the major criticisms of the NMHP and particularly the DMHP was that it was not independently evaluated before its larger scale expansion during the 10th and 11th Plans. Hence, an independent evaluation was commissioned by the Ministry of Health and Family Welfare, Government of India and was carried out by the Indian Council of Marketing Research (ICMR), New Delhi during 2008-2009 (30).

Twenty districts (4 each from five zones of the country – East, West, North, South and Central) and 5 non-DMHP districts (control) were selected for evaluation. The beneficiary districts were chosen proportionately from those started during the 9th and 10th Five Year Plans. Primary data was collected from 15th October to 15th November 2008. Perceptions of medical professionals, beneficiaries (patients) and community members were systematically obtained. Various aspects of the programme including sanction and utilization of funds, recruitment and retention of personnel, quality and effects of training, nature of IEC activities, availability of drugs, satisfaction with the quality of services and community awareness of mental health were evaluated.

It was observed that implementation of the DMHP had resulted in the availability of basic mental health services at the district / sub-district level. However, a wide variety of administrative and managerial bottlenecks were identified by the evaluation. It was observed that the irregular flow of funds had affected the implementation of the programme adversely. There were significant delays in the initiation of the programme even after the release of funds in some districts. Shortage of trained and motivated mental health professionals and difficulties in retaining recruited staff were problems in many states. Most of the professionals were concentrated in urban area and there was limited availability in rural area. Utilisation of funds meant for training and IEC activities was low in many districts. It was observed that most beneficiaries (61%) accessed the district hospital as their first point of contact for availing mental health services. Community Health Centres (8.7%), Primary Health Centres (7.6%) and sub-centres (2.3%) were accessed to a much lesser extent. While the report provided numerous recommendations and suggestions - one of the most important recommendations was expansion of the NMHP-DMHP to other districts of the country

2.2.7 Ministry of Health and Family Welfare, Government of India (MoHFW) and NIMHANS-2011

Based on the instructions of the Ministry of Health and Family Welfare, Government of India, an evaluation of 23 DMHPs covering the States of Maharashtra, Karnataka, Tamil Nadu and Andhra Pradesh was carried out by NIMHANS (31). The evaluation highlighted the barriers in the implementation of the DMHP like (1) lack of sensitisation & training

for nodal officers, district psychiatrist and other members of the DMHP team (2) funds were not released in time (3) non-availability of implementation guidelines (4) lack of periodic reviews of the DMHP and (5) lack of a state and central monitoring committee. The evaluation also highlighted the need to (1) involve the district administration (2) evolve guidelines and support for referral and follow up (3) ensure availability of essential drugs at the PHC (4) develop and ensure uniform IEC materials (5) conduct annual refresher training for the DMHP team.

2.2.8 MoHFW, Mental Health Policy Group Review and Recommendations -2012

To clearly identify a road map for mental health and to strengthen implementation, the Ministry of Health and Family Welfare, Government of India appointed a Policy Group in 2011 to conduct a situational analysis of the need for mental health care and the provision of mental health services in the country by carrying out a systematic review of the evidence base to prepare a National Mental Health Policy and Plan (32).

The recommendations of the Mental Health Policy Group included:

1. Proper training and handholding by centres of excellence and expert institutions and groups
2. A client - centred approach with psychosocial counselling in a befriending environment that supports and promotes a state of overall well - being
3. Engage users and caregivers in the process of recovery
4. Ensure the availability of appropriate medication
5. Delineate the roles of team members, provide adequate training and ensure greater co -ordination between team members as well as other health/welfare teams
6. Develop a continuum of services that include rehabilitation, long - term care etc.
7. Focus on the needs of vulnerable groups like women, children, the elderly, homeless, migrants and persons living in strife prone areas
8. Develop clear protocols of intervention at each location
9. Build a clear monitoring and evaluation plan with scope for midcourse correction
10. Constitute a technical advisory team

2.2.9 Report of the Technical Committee on Mental Health constituted by the National Human Rights Commission (NHRC).

The Technical Committee constituted by the NHRC to evaluate mental health services in India submitted its report in 2016 (33). The committee highlighted the need for specialised services and adequate human resources (both specialised and non-specialised) to meet the needs of persons with mental disorders. It recommended the delivery of comprehensive mental health services with mental health integrated into primary health care to provide a continuum of services ranging from emergency and acute care to psychological and pharmacological treatments. It also recommended psycho -social rehabilitation that addresses basic needs (like food, shelter, clothing, safety),integration with family and friends, access to social services, equal opportunity for education and work, gainful

employment, ownership of assets, travel benefits, right to marriage and a complete family life. The committee also highlighted the need to provide special focus on children, the elderly, gender-related mental health needs, homeless and destitute persons with mental illness, persons in correctional and other custodial locations and persons with severe psychological distress. The need to strengthen centre - state collaboration, central institute/state collaboration, inter-agency collaboration, public - private collaboration for optimal service delivery in the present context was also highlighted.

The committee also provided key recommendations to the member states to (1) develop a comprehensive mental health action plan, (2) develop mechanisms for regular monitoring and reporting, (3) augment mental health human resources, (4) sensitise and train all its health care providers in mental health, (5) sensitise and train undergraduates, (6) integrate mental health evaluation and care components into many of the communicable and non-communicable disease programmes, (7) recognize and assist NGOs, (8) train lay counsellors and community health workers, (9) conduct sensitisation and training programmes for judicial officers, administrators in the departments of health, social services and other relevant departments, (10) facilitate the formation of associations of persons with mental disorders, (service users) and their families, (11) augment mental health promotion strategies, and (12) develop the budget and identify the sources of funding for each activity.

2.2.10 DMHP Experiences

In addition to large scale national and state reviews, a few small scale evaluations of the DMHP have also been carried out. In 2003, Krishna Murthy et al (34) from Hyderabad reported that DMHP in its present form caters only for patients with severe mental disorders and is not of much benefit to the large segment of population with minor mental health problems like anxiety, depression etc.'It also highlighted the need to effect changes in the training and modalities of involving medical officers in the implementation of the DMHP, if better mental health care was to be delivered in the rural areas.

Similarly, an in-depth qualitative study by Ananth Kumar (2005) (35) in the DMHP clinic at Jahangirpuri in Delhi, observed that there was no provision for guidance and counselling nor a comprehensive approach or teamwork with the inclusion of professionals like clinical psychologists and physicians. The lack of coordination between the facilities and various agencies, especially the NGOs working in the area was also noted. There was no integration of mental health care with primary health care nor was there any provision for the early detection and treatment of patients within the community. The other shortcomings included the absence of awareness programmes to reduce the stigma attached to mental illness through change of attitude and public education; failure to treat and rehabilitate mentally ill patients discharged from mental hospitals, failure to undertake community surveys on mental illnesses and other associated factors, even when feasible. At times, some medicines were not available and patients had to buy them from the market and there was no provision for reimbursement'.

Experience of the DMHP for six months by Warraich et al (2003) (36) in Chandigarh reported that decentralisation of services was a felt need of the community and required not only in rural but in urban areas as well.

2.3 Current Scenario

The journey of the NMHP and the DMHP unfurls the progress and problems in programme implementation since its inception. The previous reviews and evaluations of NMHP in India have focused either on evaluating standards of care in mental hospitals or examined care delivery under the DMHP. An examination of mental health systems as they exist in larger health systems is largely missing.

Not with standing these, several changes are occurring in the mental health field in India. At present, the DMHP has been extended to 241 districts in the country and it now incorporates promotive and preventive activities for positive mental health which includes school mental health services (life skills education in schools, counselling services), college counselling services through trained teachers/counsellors, work place stress management services for formal & informal sectors including farmers and women and, suicide prevention services consisting of counselling centres at the district level, sensitisation workshops, IEC, helplines etc (37). Based on a life course perspective, several areas like child mental health, adolescent mental health, deaddiction programmes, elderly mental health, suicide prevention, maternal mental health, and others in specialised institutions are recognized as important areas for further development and strengthening.

Mental Health is now included under the larger rubric of NCD programmes, for administrative convenience. Integration mechanisms are yet to emerge. Allocation of funds for mental health, as in other programmes has been visible, though underutilised in many states. The Scheme A and Scheme B of the Government of India to establish Centres of Excellence, improve mental hospitals, recruit more graduate trainees in mental health and related fields is a recent development. The involvement of the judiciary, engagement of civil society and participation of the media (though extreme at times) are also seen. Most significantly, India has worked towards a national mental health policy, action plan and mental health bill which are expected to bring profound changes in mental health care delivery.

Innovations lead the way....Kerala

Integration of Mental Health Care with Primary Care –DMHP Thiruvananthapuram

The process of integration of mental health care with primary health care was initiated in the year 2011. The primary care doctors were trained to deliver mental health care in the government health facilities. This was achieved in co-ordination with DMHP team. Subsequently, mental health care is being provided in 98 centres across the state. The DMHP, in turn, conducts about 28 clinics in a month across the district. These clinics serve as referral points for the primary care mental health services. In addition, ASHA's were trained to identify mental health problems and, after training undertook active case finding survey in 10 grama panchayaths. A key activity being undertaken since a long time has been the school mental health programs with a specific objective of creating mental health awareness.

3. Need for Mental Health System Assessment in India

Despite some significant achievements, a major question still remains unanswered: Is there an ongoing larger mental health system development and a public health approach for mental health programmes in India?

Previous assessments of the mental health burden in India have revealed that the prevalence of major mental and behavioural disorders at any given point of time was estimated at 65 / 1000 population in all ages and both sexes. The present National Health Survey in India has estimated that nearly 10.7% of the Indian population suffers from a mental health illness, with the treatment gap still remaining at more than 80% across states. The rates vary across states from a low of 5.8% to a high of 14.1%, necessitating the development of augmented mechanisms to deliver mental health care. The inadequacy of services has been reported not only for the quantity but also for the quality of mental health services (24).

India spends less than 1% of its total health budget on mental health (12). It also faces a severe shortage of mental health professionals, with only 0.3 psychiatrists per 100,000 population and with most of them concentrated in the Southern and Western regions of the country (38). The mental health workforce shortage in India, is further aggravated by the migration of psychiatrists to high-income countries. Preventive / promotive programmes and rehabilitation services are still far from satisfactory. The protection of the rights of the mentally ill is inadequate in many parts of the country. Poor quality of care and violations of human rights, including involuntary admissions to an institution, restrictions and isolation, inadequate living conditions, social exclusion, and denial of employment and education have been well documented (33). Even though welfare measures such as pensions, legal aid, and travel concessions are available for people with Schizophrenia and intellectual disabilities through the Persons with Disabilities Act 1995 (39), the effective coverage of such welfare measures, however still remains uncertain.

Even though India was the first country in the world to attempt to integrate mental health services with general health services at the primary care level through the NMHP, its endeavour to bridge the treatment gap and decrease the deficits in human resources, failed to gain the desired momentum. The progress has been very slow even after 30 years of its launch. Even the access to mental health services in India continues to be a major challenge with up to 40% of patients travelling more than 10 km to access DMHP services (30). The matter is further aggravated by the huge population and the large land area to be covered.

In India, health systems are largely governed by states. Hence, the effectiveness of the programme also varies across states due to cultural, regional, and political considerations. Across the states, there exists differential funding, shortages of human resources, and poor motivation among service providers at all levels (38).

In recent years, various innovations to improve access to mental health care have

been gradually implemented in India. Apart from the National Mental Health Policy, the National Programme for Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke and the National programme for Health Care of the Elderly are in place and there exists an immense scope for integration and strengthening of mental health systems in India. Thus, identifying the critical areas of integration and strengthening through a systematic assessment of the mental health system becomes crucial for making the best use of opportunities that are available. This assessment will provide essential information for relevant public mental health action to improve the mental health outcomes in India. Several benefits of such an assessment include:

- Developing baseline information that would enable states to develop evidence based policies and programmes with clear targets for improving mental health.
- Identifying major weaknesses and critical gaps in mental health systems to develop need-based mental health plans.
- Measuring mental health system performance in areas like implementation of policies, action plans, programmes, legislation, financing, intersectoral collaboration, drug supply, IEC activities, providing community services, involving consumers, families, and other stakeholders in mental health promotion – prevention – care - rehabilitation.
- Identifying resource gaps in several areas for investing in resources development, and
- Developing a set of indicators to track progress and changes at periodical intervals.

Box 1: Sustainable Development Goals (SDGs)

Target/Subgoal 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

3.5: Stregthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol

Box 2: WHO Mental Health Action Plan 2013–2020 targets

Target: 80% of countries will have developed or updated their policy/plan for mental health in line with international and regional human rights instruments (by the year 2020).

Indicator: Existence of a national policy and/or plan for mental health that is in line with international human rights instruments [yes/no].

Target: 50% of countries will have developed or updated their law for mental health in line with international and regional human rights instruments (by the year 2020).

Indicator: Existence of a national law covering mental health that is in line with international human rights instruments [yes/no].

Target: Service coverage for severe mental disorders will have increased by 20% (by the year 2020)

Indicator: Proportion of persons with a severe mental disorder (psychosis; bipolar affective disorder; moderate-severe depression) who are using services [%].

Target: 80% of countries will have at least two functioning national, multisectoral mental health promotion and prevention programmes (by the year 2020).

Indicator: Functioning programmes of multisectoral mental health promotion and prevention in existence [yes/no].

Target: The rate of suicide in countries will be reduced by 10% (by the year 2020)

Indicator: Number of suicide deaths per year per 100 000 population.

Target:80% of countries will be routinely collecting and reporting at least a core set of mental health indicators every two years through their national health and social information systems (by the year 2020).

Indicator: Core set of identified and agreed mental health indicators routinely collected and reported every two years [yes/no].

Furthermore, a systematic assessment of the mental health system in India becomes critically important from a national and global point of view with the inclusion of mental health in United Nations Sustainable Development Goals (SDGs), as mental health is a part of the country's development and assistance plans. Within the health goal of SDGs, mental health is directly included under target 3.4 which has proposed the reduction of one third premature mortality from non-communicable diseases through prevention and treatment, and promotion of mental health and well-being by 2030. The targets of the WHO Mental Health Action Plan 2013–2020 were endorsed for monitoring the mental health component of SDG. The WHO's Mental Health Action Plan apart from having a policy / action plan and updating / developing legislations, calls for an increase in the service coverage for severe mental disorders by at least 20% by the year 2020. Along with reducing suicides, strengthening / reporting it becomes essential to have regular, up-to date information on mental health systems to monitor their progress towards the implementation of the WHO Mental Health Action Plan 2013–2020 targets (7,40).

3.1 Mental Health Systems Assesment

Comprehensive assessment of the mental health system involves coordination, collection and compilation of data from various sectors including those from outside the formal health sector which provide mental health care services and support. Systematic data collection under continuous technical support involves an iterative process of checking, triangulating and validating the collected data.

Despite the obvious benefits of an assessment of mental health systems, there are several challenges in their measurement. These include:

1. A near absence of a system for collecting and reporting basic mental health information especially from the rapidly growing and mostly unregulated private sector.
2. A need to adapt and standardise data collection tools, which are, suited to the needs of developing mental health systems with specific context to cultural, regional and political perspectives.
3. Development of indicator schemes that have adequate coverage and applicability for the locally relevant and available data for current assessment and future monitoring.
4. Building consensus among the key stakeholders for the reported data / information.
5. Difficulty in obtaining precise data that are specific for mental health system performance / outcomes or assessing effectiveness for a setting. For example,

information about the performance of mental health care settings (e.g., average length of stay, people staying for more than 5 years, emergency care during the stay in a mental health facility, etc.,), infrastructure available within a mental health facility, details of community-based services provided or elements of a functioning information system are often not available and even when available, there is the challenge of reconciling data / information from different sources.

3.2 Mental Health Systems Assessment Under the NMHS

In order to develop a comprehensive and integrated road map for mental health, the MOHFW commissioned the National Mental Health Survey (NMHS) with the objectives of – (i) identifying the prevalence and pattern of mental, neurological (epilepsy) and substance use disorders from a representative national

A brief review of developments on the mental health scenario in India reveals that since the beginning of THE NMHP in 1982, a few attempts have been made to strengthen different components of mental health systems at national and state levels by individual teams. Various technical groups, expert committees, judiciary, professional bodies, media groups, civil society members and others have made several recommendations to improve the scenario, but have largely focused on individual components and not on total systems development. Anecdotal reports and independent studies reveal the inadequate status of mental health services and care in India even after 3 decades of the beginning of the NMHP. While DMHP, the implementation arm of the NMHP, has been expanded and is likely to cover all districts of India, the status of implementation still remains weak and far from satisfactory.

A major reason for the current scenario is the failure of mental health programmes to get established as a public health programme in the larger health system. A public health programme works within a well-established system that encompasses, integrates and operates on a comprehensive basis with importance to every component of the system. Such a comprehensive understanding and analysis has been limited or not undertaken for mental health.

In order to give a systematic approach to mental health, The Ministry of Health and Family Welfare constituted a mental health policy group , developed mental health policy and mental health action plan, and formulated the mental health act for implementation in coming years. Along with this, DMHP is being expanded to cover all districts, budgetary allocation has been increased, centers of excellence have been established, legislative reforms are proposed (like decriminalization of attempted suicides) and recently, mental health has been included under the NCD flexi pool budget. Needless to say, all these are major developments and needs implementation in all sincerity. All this can be achieved with appropriate strengthening of mental health systems with good monitoring of implementation and continuous evaluation mechanisms. An assessment of mental health systems is the first step and is essential for strengthening implementation steps.

sample drawn from 12 states of India, (ii) recognizing the treatment gap, and (iii) assessing the current status of mental health services and systems in the surveyed states. Thus, at one point of time, the NMHS brings together information on all components related to mental health care through one nationally representative study and sets the baseline for 2016 to develop – implement – monitor and evaluate all future activities.

3.2.1 Purpose

The State Mental Health System Assessment (SMHSA) under the National Mental Health Survey (NMHS) is a systematic and comprehensive analysis of components and sub-components of health systems that cater to the delivery of mental health services at the individual state level. The SMHSA supplements information and complements the recommendation of the National Mental Health Survey. The SMHSA included the following 10 areas for enquiry:

1. Mental Health Policy and a Mental Health action plan in surveyed states.
2. Infrastructure for the delivery of mental health care.
3. Health human resources for mental health from health and health related sectors including training / sensitisation programme for doctors / other health staff like ANM, HW, etc., and other personnel like teachers, lawyers, police etc.
4. Delivery of mental health care in terms of availability of psychotropic drugs throughout the year in district hospitals / Community Health Centers (CHCs) /taluka hospitals / Primary Health Centers (PHCs) along with availability of follow up care / domiciliary care in the community and outreach activities for mental health problems.
5. Implementation of legislations for mental health.
6. Public education and IEC activities along with welfare measures for those with mental health problems.
7. Linkages with other sectors / departments like education, women and child welfare, social welfare for different activities .
8. Dedicated budget for mental health activities.
9. Engagement with civil society, and
10. Programme monitoring – evaluation and research including monitoring of the quality / type / nature of services provided.

The results of the Mental Health Survey are provided separately and only the State Mental Health System Assessment details are in this report.

3.2.2 Objectives

1. To examine the available health and health related resources for mental health activities / programmes in the 12 surveyed states.
2. To examine the status of mental health services and programmes in the surveyed states through a systems assessment framework.

3.2.3 Preliminary Work

The District of Kolar located about 70 kms from Bengaluru has been designated as the Public Health Observatory of the Centre for Public Health at NIMHANS. With a population of nearly 16 lakhs, being a non-DMHP district, the district of Kolar is being devel-

oped as a Public Health Observatory for mental, neurological and substance use disorders, injuries and other NCDs. The observatory serves as a platform for generating evidence based support for macro and micro level analysis through in-depth examination of the dynamics of health system functioning to improve and enhance quality care.

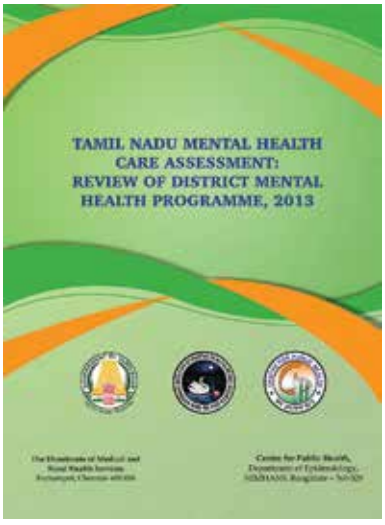
Assessment in Kolar district

During the year 2013, a situation analysis was undertaken with the recognition that the health systems approach is a better public health strategy to improve services for mental health care. With the goal of assessing mental health systems, the WHO AIMS instrument was identified, modified and adapted to gather relevant and adequate information at the district level.

Series of discussions were held with the Mental Health Programme Officer at the state and district levels. This resulted in the listing of a minimum set of data/ information that would be readily available and matched with the list of data elements / information points that would achieve the objectives of the Mental Health Systems Assessment.

Based on this, a comprehensive instrument for assessing the District Mental Health Systems Assessment was developed and field tested with data available from the Kolar Public Health Observatory. The draft version of the instrument was reviewed with the district level officials, minor modifications were made in the flow of the questions, and structured responses were developed. This assessment has formed the basis for programme implementation and monitoring of mental health activities in the district (41).

Assessment in the state of Tamil Nadu



The district level assessment methodology was adopted and implemented in the State of Tamil Nadu in 2014 based on the request of the Nodal Officer of the Mental Health Programme. The District Mental Health Systems Assessment proforma which was pilot tested in the District of Kolar, Karnataka was reviewed and found appropriate to assess the mental health systems in the State of Tamil Nadu. It was decided that the strategy for collation of the district level proforma was better suited for a review of the state mental health systems.

At the time of review, in Tamil Nadu 16 out of 32 districts had the Central Government supported District Mental Health Programme. The objective of the activity was identified to be two-fold: firstly, review of the status of implementation of the Mental

Health Program and secondly, identification of the challenges and strengthening of the mental health programme within the state.

Data was collected from all the 16 districts under the DMHP. The completed forms were scrutinised by the Tamil Nadu state team before being collated at the Centre for Public Health, NIMHANS. Each of the filled up DMHSA proforma was analysed and a district fact sheet was developed. The information provided from each district was used to review the status of mental health care and identify the challenges for implementation.

A state level deliberation was conducted wherein the state report along with the district fact sheets were released and over day long proceedings, an action plan for improving the state mental health system was developed. Key decisions taken included: systematically planning for training programmes, streamlining drug logistics within each district and planning for better rehabilitation services. This deliberation also served for the exchange of thoughts, sharing of experiences and most importantly for identifying unique and innovative programmes / activities that were being implemented at the district level.

During the deliberations, the information bottlenecks of a monitoring system were listed. Other key areas discussed were in respect to the existence of an action plan for mental health activities in the district, financial allocations, burden of mental health problems – prevalent cases v/s incident cases, inter-sectoral collaboration, mental health research, etc. One major area of lacunae was data / information from the private sector. Despite these shortcomings, the exercise revealed that a state level assessment for mental health care is possible and also feasible. Tamil Nadu state health functionaries and the DMHP officers also opined that this exercise was a useful one; providing them with unique insights into the functioning of mental health care from a systems point of view. Another key outcome of the efforts in the State of Tamil Nadu was the development and testing of a monthly monitoring proforma for mental health related activities (42).

Innovations lead the way....Gujarat
Quality Assurance in Mental Health

Quality Rights Gujarat Project is an innovative intervention to improve existing mental health services by reorienting services from a purely medical approach to a holistic, comprehensive and participatory approach that values and emphasizes on empowerment, autonomy, recovery and integration into the family and community. Implemented since 2014 , 4 hospitals for mental health, 3 departments of Psychiatry in government medical colleges and 3 district mental hospital psychiatry aims to bring quality improvement in public mental health facilities, ensuring rights of persons to reduce disability, improving functioning of persons leading to improved health, social and development outcomes for service users.

The basic objective of this project is to promote and protect the rights of persons with mental illness and mainstreaming such persons by providing equal opportunities in the community. Mental health professionals at the public mental health services will be trained as per WHO Quality Rights Standards to provide quality care at these facilities and make persons with mental illness and their families aware of their rights.

Quality Rights Gujarat is implemented in collaboration with Centre for Mental Health Law and Policy at Indian Law Society (ILS), Pune, World Health Organization (WHO), Geneva, Centre for Addiction and Mental Health (CAMH), Toronto; Schizophrenia Awareness Association (SAA), Pune; Schizophrenia Research Foundation, Chennai; Public Health Foundation of India (PHFI), New Delhi.

4. State Mental Health System Assessment

4.1 Project Management

- The Director of NIMHANS constituted a **Core team and an NMHS - NIMHANS study team** to plan, undertake and implement the different components of the NMHS including those for State Mental Health Systems Assessment. The Centre for Public Health was entrusted with the responsibility of coordinating and Implementing the NMHS and was supported by faculty from the Department of Psychiatry. One faculty from the CPH was the designated coordinator for 2 of the 12 NMHS states.
- **THE NIMHANS – NMHS State Team** comprised of the Principle Investigators (PIs) and Co-Principle Investigators (Co-PIs) at the state level along with team members of the Centre for Public Health (CPH). The CPH team provided continuous support and handholding for the implementation of the SMHSA and the DMHSA for the individual state teams.
- **NMHS State Advisory Committee** at the state level consisted of representatives from the State Health and Family Welfare department, the Directorate of Health and Family Welfare / Public Health, State Mental Health Programme Officer, and mental health professionals from both the public and private sectors including NGOs, leaders in the mental health field, academicians and researchers of repute were also invited wherever possible. While the PI of the study was the Convener, the senior most person / functionery was designated as the Chairperson. The NMHS state Advisory Committee supported and facilitated the smooth conduct of the NMHS survey and played a key role in completing data gathering and review activities.
- **Data Collection Team** at the state comprised of the Community Medicine / Public Health Investigator along with the PI of the project. With support from the study coordinator and field data collectors, the SMHSA coordinator collected, reviewed and collated the information from different secondary and tertiary sources. The SMHSA coordinator was also the convener of the NMHS state advisory board / committee.

4.2 Ethics Approval

The final NMHS Master Protocol (NMP) which included the component of undertaking the Mental Health Systems Assessment was submitted to the NIMHANS Institutional Ethics Committee for approval. After deliberations, the NIMHANS IEC provided clearance for the NMP vide its letter NIMHANS/DO/97th IEC/2015 dated: 29-04-2015. Further, each of the study sites, adopting the NMHS Master Protocol, obtained separate IEC approval from their individual institutional ethical committees. As the NMHS in Tamil Nadu was undertaken by the Office of the Nodal Officer of the NMHP in Tami Nadu, the NIMHANS ethics approval was deemed valid.

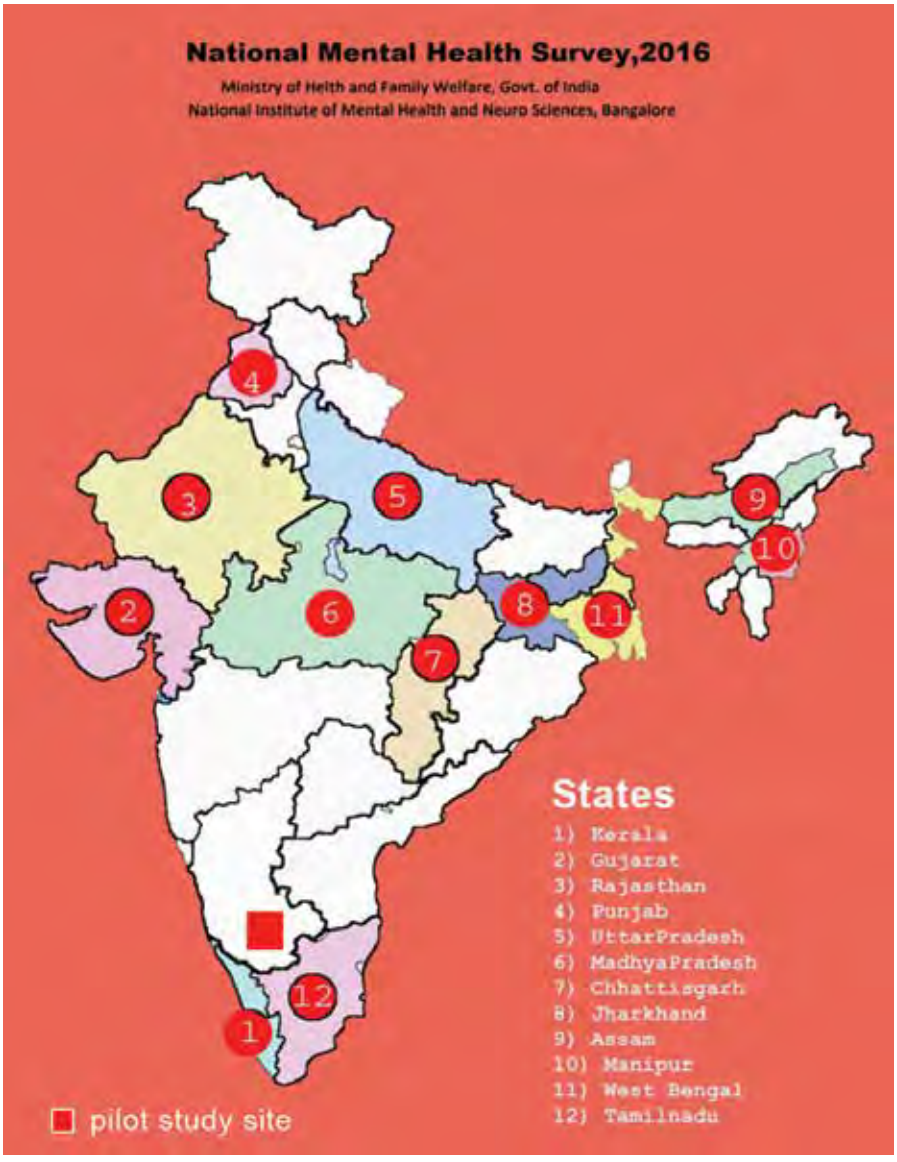
4.3 Methodology

4.3.1 Selection of study sites

The NMHS, a unique endeavour in post-independent India, was undertaken as a large scale, multi centred national study on mental health problems in India. After due deliberations in the National Technical Advisory Group (NTAG), the study sites for Phase 1 of the NMHS were selected based on the availability of an interested and reliable partner and the willingness of the partner to be a stakeholder in the project. These states also formed the participating centres for the survey component of the NMHS. The following states were identified for undertaking Phase 1 of the NMHS for India:

1. North : Punjab and Uttar Pradesh,
2. South : Tamil Nadu and Kerala,
3. East : Jharkhand and West Bengal,
4. West : Rajasthan and Gujarat,
5. Central : Madhya Pradesh and Chhattisgarh,
6. North-east : Assam and Manipur.

Figure 3: NMHS states included for SMHSA



4.3.2 Development of the Master Protocol

The NMHS Master Protocol (NMP) outlined the defined objectives, different components and delineated work flow primarily emphasizing on "what to do" in each of the selected sites. It provided the overall framework and guided the NMHS State Teams to scientifically and systematically plan and implement the different components of the NMHS. The process of development of the NMP is discussed in detail in the first report of NMHS.

In brief, the NMP for the SMHSA evolved over several discussions and consultations benefitted from inputs by the NTAG, national expert panel, and were discussed with the PIs and partner institutions during the first National Collaborators meeting. The NMHS State Team (NST) accepted that the NMP was feasible and possible including the SMHSA.

The 69 page NMP document outlined different components and steps of NMHS over 20 sections. While the bulk of the NMP document delineates the conduct of door to door surveys, including project

management, training, quality assurance, ethics, budgetary guidelines, etc., Section 18 explains the methodology of assessing the mental health systems, resources and services at the state level. The NMP identifies the broad areas of enquiry under the MHSA and also provides an over view for the method of implementation of MHSA in each state. Approximately 3 to 4 person – months were apportioned for undertaking the Mental Health Systems Assessment.

4.3.3 Development of the Operational Guidelines

The Operational Guidelines (OG) document was the companion document of the NMP and provided a step-by-step guide to the activities specified in the Master Protocol. It supported and facilitated the smooth conduct of the National Mental Health Survey across 12 states of India and ensured that the different components of the NMHS were undertaken in a uniform manner. Using a simple language, the format of OG was like a hand book. In all, three OG documents were prepared during the period of the survey: 1) OG document 1 predominantly focused on data collection in the field; **2) OG document 2 focused on data collection as well as planning and implementing the consensus meeting for finalizing the SMHSA;** 3) OG document 3 focused on undertaking FGDs and KII.

Section C of OG document 1 provided an overview of the methodology that needed to be adopted for the Mental Health Systems Assessment. A brief version of this OG section was also included in the MHSA proforma as an introductory note and specifically included the responsibilities of the MHSA Coordinator and timelines for the completion of the MHSA.

A separate OG document (OG document 2) 'Guidelines for the State Mental Health System Assessment', was developed to aid the NST to undertake and conduct the consensus meeting. This document was broadly divided into 5 sections and provided a background to the activity. Sec A introduced the concept of MHSA, Sec B and C delineated the focus and outcome, while Section D dealt in detail with the steps for undertaking the MHSA and Sec E enumerated the steps to be taken after completion of the MHSA.

The development of the MHSA and the DMHP proforma was a process beginning with the review of WHO-AIMS instruments (9) and WHO Atlas (12). It also dealt with the experiences and lessons learnt in Kolar and Tamil Nadu, discussions with project PIs and consultation with stake holders. All this helped refine the efforts related to methodology and structuring of the proforma which also improved over time.

During the entire process, information gathering was directed at three levels.

- Firstly, a comprehensive assessment of the mental health system at the state level was the primary focus.
- Secondly, those districts in the respective states currently implementing the district mental health programme were targeted to collect information for understanding the functioning of the DMHP.
- Thirdly, the focus was on all the other districts that are currently not covered under the DMHP.

The OG also enlisted the steps for data gathering which included - review of the proforma by the state advisory board, obtaining permission for data collection,

sensitisation of health functionaries during their routine meetings about the MHSA and the need to provide data that was as accurate as possible. The other steps listed were- filling up of the proforma based on data from multiple sources, review of the draft filled up proforma, feedback to the state teams, identifying the missing information and discrepancies and resolving the same, final review of the proforma, development of indicators and scores based on this final draft, finalization of the draft proforma / filled up of information during the consensus meeting and refinement of indicators. Thus, this detailed and elaborate process helped to develop a near final document which was used to develop final indicators, scoring system and a fact sheet for each state.

This OG document also specified the methodology of conducting the consensus meeting including the individuals who needed to be invited to participate. In brief, it laid down that "a larger and broader holistic view has to be taken in the assessment" and "a comprehensive assessment of the domain is important", as the information pertains to the whole of the state or the entire district. It was specified that this process was to be consultative, participatory, review based and factual and was to be used for developing a baseline state mental health report. It was made amply clear that it was not a process of self-appreciation or ranking and was independent to any other ongoing activities.

4.3.4 Focus under SMHSA

The MHSA tool is organized into sets of domains and sub-domains. A domain is defined as an area of interest or related interest. The tools captures related information about the Mental Health Systems within the state under 10 domains (Box 2). Currently, the SMHSA includes information on all 10 domains along with their sub-domains.

Box 3 : Domains and sub-domains under MHSA
1. General information about the state
2. State health resources
a. Number of health care institutions in the state from both Government and Non-Government sectors (Non-Government Organization includes for profit, not for profit, voluntary, etc.)
b. Health human resource availability
c. State health management Information System
3. Mental health systems and resources
a. Mental health policy
b. Mental health action plan
c. State level authority responsible for supervising mental health related activities / programmes within the state
d. Human resources development
i Mental health human resources
1 Health sector
2 Health-related sector
ii Training in mental health and related areas
iii Mental health education / sensitization programmes
e. Mental health legislation and implementation
f. Financing and budgetary provisionsfor mental health care
g. Mental health services within the State
i Facilities for mental health services
ii Other facilities
4. Management of mental health problems
a. Details of inpatient care
i. Total number of patients in mental hospitals (by length of stay)
ii. Involuntary and total admissions to inpatient mental health facilities

b. Burden
i. Mental Neurological and Substance use disorders
ii. Suicides
c. Information sources and maintenance of records
d. Availability of drugs
e. Additional services
5. Intra- and inter-sectoral collaboration
6. Social welfare activities
7. Engagement with civil society
8. Information education and communication activities
9. Mental health indicators(monitoring)
10. Monitoring and Evaluation

Domain 1: This domain gathers general information pertaining to the population and demographic parameters of the state and documents the coverage of the DMHP programme and special programmes (if any) for mental health by the state. The information pertains to population details (total, male and female distribution, age groups, work force, urban-rural and tribal populations). Specific state related information like the number of districts - those with DMHP and state programmes if any, is documented to obtain a preliminary picture of the state.

Domain 2: Data on all the available health resources is vital to generate the required human resources for mental health care. A conscious attempt was made to tap resources outside the public sector and includes those from both the private and NGO sectors as well. Thus, domain 2 gathers information about the general health facilities and resources within the state. Facilities include primary care (PHC, Sub Centre, clinics, etc.,), secondary care (district hospital, Sub-district hospital, etc.,) and tertiary care (medical college hospitals, specialised institutions, mental hospitals, etc.,). Human resources include specialist doctors, general duty doctors, nurses, health workers - male and female, AHSA workers, etc. Information pertaining to health Information systems (including status of computerisation) provides the crucial link between health facilities and health human resources.

Domain 3: This domain examines mental health systems comprehensively and information is recorded under various sub-domains, each of which specifically reflects the sub-systems that are needed for a well-functioning mental health system. The sub domains include Mental Health Policy, mental health action plan, mental health human resources (both in health and in health-related sectors) and training programmes and sensitisation activities, mental health legislation, financing and budgetary provisions. Facilities for mental health (both outpatient and inpatient and other facilities as specified under the Mental Health Act are included to examine the base line scenario.

The information for these sub-domains includes data of different types - quantitative, semi-quantitative and qualitative or perceptual data. This wide range of data is principally due to the lack of hard wiring of data within the mental health systems and their sub-systems. While the response to the

presence of a policy or action plan is a yes or no; the same yes or no cannot be a response for the implementation / status of different action plans. Similar is the case for the status of implementation of legislation, or with respect to drug logistics. Thus, for such sub-domains, semi-quantitative and / or ranking of information has been adopted. For example, for status of the action plan, consensus is arrived regarding the components of an action plan which range from 0 to 10 and are considered as the overall situation across the state and not with respect to any one area / institution specifically. The availability of drugs is categorised as always, many times, sometimes or irregular supply. The listing of different registers for mental health care at different levels of care has been adopted. For many domains, all available documents were examined before accepting final information.

Domain 4: This domain pertains to the management of mental health problems and is focused on documenting the burden of mental health problems within the state. It collated and collected information pertaining to management of mental health problems using the ICD classification. Age and gender specific burden of suicides was also included. Supplementary and related aspects of case management like maintenance of registers, provision of drugs across the state and at different service delivery points (district, CHC, taluka, PHC, etc.,) are recorded. This section also documents information pertaining to details of camps and outreach services conducted. The key output from this section is an estimate of the total burden of mental health problems currently being served by the different health facilities within the state.

Domain 5: The determinants of mental health reside outside the health sector; systems for care are incomplete if these health, and health-related sectors are not included. In addressing these concerns and issues about mental health, domain 5 collects details about the intra and inter-sectoral activities. The information from this section underscores the need for both intra- and inter-sectoral collaboration and recognizes the contribution of sectors of education, women and child development, disability / welfare and others for issues and concerns of mental health. Recognizing the difficulties in recording intra- and inter-sectoral collaboration, this domain documents the presence of activities either planned or implemented and provides explanations regarding the different sets of activities.

Domain 6: This pertains to social welfare activities. Persons with mental health problems are highly vulnerable and sensitive to changes in the socio-economic sphere, thus necessitating the pro-active involvement of social assistance, assurance and other defence mechanisms to support and boost the livelihood of persons affected with mental health problems. While, there can be an array of facilities that could be provided / made available, in the current version of the SMHSA, the focus is on issuing of disability certificates, provision of monthly pension / assistance, reservation in jobs and preferential allotment in housing.

Domain 7: Civil society and its organisations play the role of conscience keeper. Different mental health NGOs serve to highlight and monitor, supplement the services in the government sector. Domain 7 attempts to profile the different NGOs working in the state for the welfare and service of persons with mental illness

Domain 8: IEC activities are an essential component of any health programme. In the context of mental health, the need for IEC activity assumes greater importance because

awareness about mental health problems and the stigma attached to it has an adverse effect on health seeking behaviour. Health education can be disseminated by using different audio-visual aids, (television, radio, social media, posters, flannel graphs, exhibits etc.) and by using different methods (one on one basis, role plays, lectures to groups of people, using folk methods etc.) as well as social media .These methods were documented for availability at peripheral levels. Domain 8 deals with the availability of different formats (pamphlet, brochure, poster, video, etc.,) with respect to different disorders and its availability in local languages. To factor in the gaining popularity of the use of social media an additional question was included regarding the extent of its use.

Domain 9: The questions in Domain 9 is on mental health indicators and is derived from the WHO atlas. It indicates the extent of use of available data for purposes of programme development. The focus was on the presence of a specific mental health report which contains information on various aspects of the mental health programme, resources for mental health and the burden of mental health problems in the state, etc.,

Domain 10: Monitoring and evaluation are the twin pillars indicating the status of health programmes and services. Periodic evaluation helps to alter strategies, redefine objectives and modify one or more components of the programme. Thus, domain 10 documents whether any evaluation of mental Health systems and care was undertaken and its details.

4.3.5 Data Sources

It was evident from our earlier work that the data required for assessing the mental health systems under different domains could not be obtained from a single source. Even within each domain, a combination of data sources rather than a single data source was required. There were certain areas where precise data was not available or was difficult to obtain from routine data sources. Thus, multiple sources and methods were required to provide a clear and broad picture of a mental health system.

For SMHSA, data was collected by actively involving and interacting with key persons at different levels of the health system. A communication was issued by the Chairperson of NTAG inviting all concerned state health departments to participate and cooperate in the mental health systems assessment. A list of all relevant data sources for each item along with guidelines was prepared by the NIMHANS team and provided to the state teams. The different sources of data included a review of - census documents and abstracts, state programme implementation plans, different records / documents in state health departments, State Directorate of Economics and Statistics, State Crime Records Bureau, mental health programme reports, data from different state bodies like the state medical council, state pollution control board, professional bodies like medical, psychiatric and nursing associations, affidavits filed by the respective states and several others. (Refer to annexure)

In addition, an open search was undertaken to obtain the relevant information for the respective state. Further, the state MHSA coordinator and / or PI attended district level meetings, visited several of these offices and departments personally.

Based on their availability, data sources were classified at different levels into national /

state / district / taluka and facility level. Data sources were approached hierarchically from the national level to the facility level till adequacy and saturation were obtained for each item. An iterative process of checking and triangulating data from various sources at different levels was adopted. For some items, data was used as available from a single source, while data for other items were aggregated from a variety of sources. Data was obtained from authentic reports, official documents, websites and personal communications at various levels for the latest year and the same was stated in the data sheet. The data obtained was finally validated during the state level consensus meeting. In addition, data was also cross-checked with the recent NHRC report and National Health Profile-2015 and select parameters were included. This whole process ensured that the data sources utilised were valid, authentic, and robust. However, It needs to be emphasized that in general, there was inherent difficulty in collecting data for the private sector.

Specific Data Sources

• Information on demography, administration, and economics

The Indian Census is the most credible source of information on demography (population characteristics) and is widely used by national and international agencies. This is the only source of primary data in the village, town, and ward level.

Demography included population characteristics, economic activity, literacy, and education. Data for demography and administration were collected from the Indian Census 2011 (43) while data on economics (per capita income and poverty head count ratio) was collected from reports of the Directorates of Economics and Statistics of the respective states.

• General health care facilities (GHCF)

Data was collected on the number of health care facilities at various levels from both the public and private sectors. Multiple sources were contacted to obtain data from various sectors .In case of multiple sources for the same data, routine data obtained from sources at lower levels were checked and triangulated with the routine data from sources at higher levels. Where ever needed, data was compiled to provide aggregate data.

• Human resources in general health care facilities

This section focused on collecting data on the number of human resources in health care facilities at various levels of the public sector only. Determining the size and core characteristics of the health work force in the public sector required some level of analysis and synthesis of available information from multiple sources. The use of multiple data sources increased the options for measuring and validating core health workforce statistics. Attempts were made to obtain data concerning the private sector by contacting multiple agencies.

• Coverage of the DMHP

Data was collected on the number of DMHP districts that were started before and after the 12th plan period mainly from the State Nodal Officer of Mental Health and the State Health and Family Welfare Department. This data was used in conjunction with the demography and administrative data of the Indian Census 2011 to arrive at the indicator.

- **Mental health care facilities (MHCF)**

This involved the collection of data on the number of mental health care facilities and also on the number of health care facilities that provided mental health services in the public health care system. Thus, two systems namely the general health system and the mental health system within the public health system were involved. Information relating to the general health system was obtained from the State Health and Family Welfare Department. The data relating to mental health facilities was obtained by contacting key persons in mental health facilities, medical colleges, nodal officers of the health programmes and supplemented by information from Mental Health programme officers at the state and district levels. Data was also collected from the State Mental Health Authority. All these figures were collated to arrive at the final number.

- **Human resources for mental health (HRMH)**

The size and core characteristics of the mental health workforce was assessed using data on the head counts of mental health professionals and general health professionals trained in mental health. Data on mental health professional categories (psychiatrist, clinical psychologist, psychiatric social workers, rehabilitation workers and nurses with a DPN qualification) were mainly targeted. Registries of professional regulatory bodies were also contacted.

- **Mental health financing**

The data relating to mental health financing was obtained from the various administrative and financial records of the Health and Family Welfare Departments of the participating states, state programme implementation plans and audits. Data was also obtained from the State Nodal Officer for Mental Health.

- **Burden of mental health disorders and treatment gap**

Data was captured for severe mental disorders, common mental disorders, alcohol use disorders, tobacco use disorders, epilepsy and high suicidal risk behaviour**.** The findings from the NMHS were used to assess the burden and treatment gap for these disorders.

- **Suicide**

The National Crime Records Bureau (44) under the Ministry of Home Affairs, Government of India routinely collects, compiles, and analyses crime related data from all the states across the country and publishes them on an annual basis as two sets of reports: Crime in India and Accidental Deaths & Suicides in India. Data related to the number of suicides and its distribution by age and gender were taken from the 2014 report.

- **Qualitative data**

The SMHSA also included qualitative data for areas where obtaining quantitative data was not possible or was difficult to obtain. For such elements, the data was collected through desk review of available administrative records at various levels or through personal communication with the State Nodal Officer for Mental Health. The data thus obtained was finally validated at the consensus meeting.

4.3.6 Guidelines for data collection

A separate document, outlining the steps for data collection was drafted to assist

the state teams for data collection. The guidelines for data collection laid down the three phases of SMHSA which included obtaining administrative permission to gather data, methods to sensitise different levels of administration to obtain relevant data / information, steps to identify different sources of data for different sections of the questionnaire, data collection mechanisms, steps to reconcile information from different sources and most importantly to establish a method for finalising the data in the proforma during the consensus meeting. The guidelines laid down the process of developing quantitative and qualitative indicators and the final score card for all the 12 states**. It is essential to underscore the fact that scoring was done not to rank the states but to identify the performance of different domains in a mental health system, thus enabling progress in different areas over time.**

• Training for study teams

Sensitisation cum training sessions were conducted based on the feedback and requests from the NST. These were held during the first collaborators meeting and also as e-discussion sessions during the fortnightly review sessions. They were held separately for the SMHSA. The sessions involved explaining the objectives of the domain or sub-domain, scope of data to be collected, sources of data, means of resolving conflicts in case of multiple sources of data and finalising the data set.

• Data collection process

Permission was obtained from the state health administrations in the respective states for undertaking data collection. A state level advisory committee with representation from health, public health, mental health and other functionaries was constituted and sensitised to this activity to obtain cooperation from different agencies. Subsequently the State Mental Health System Assessment proforma was developed by the NIMHANS team, which adapted the methodology as per WHO-AIMS and WHO Atlas instruments with the necessary modifications to suit the Indian context. This was then reviewed and adopted. This was the revised version of the proforma, which was discussed with the PIs and Co-PIs of the 12 states during the first national PIs meeting held at NIMHANS. It was also discussed in the National Technical Advisory group meeting and the experts' meeting.

This proforma was discussed with state health administrators and study team members to identify different domains and sub-domains of the assessment.

The Co-investigator from Community Medicine or Psychiatry was identified as the SMHSA coordinator for data collection and collation and worked closely with the PI of the state team. The coordinator in consultation with the NIMHANS Epi team identified different sources of data as outlined earlier for completing the proforma as data on all components was not available in one single place.

A comprehensive review of literature based on publicly available information was completed at the beginning of the study. During the period from September to March 2015, the MHSA coordinator along with the PI and the Co-PI collected information on different components of the proforma. This was reviewed periodically and jointly with the NIMHANS team through e-mails and e-discussions. The missing areas, incomplete information and information which was found to be unreliable were highlighted

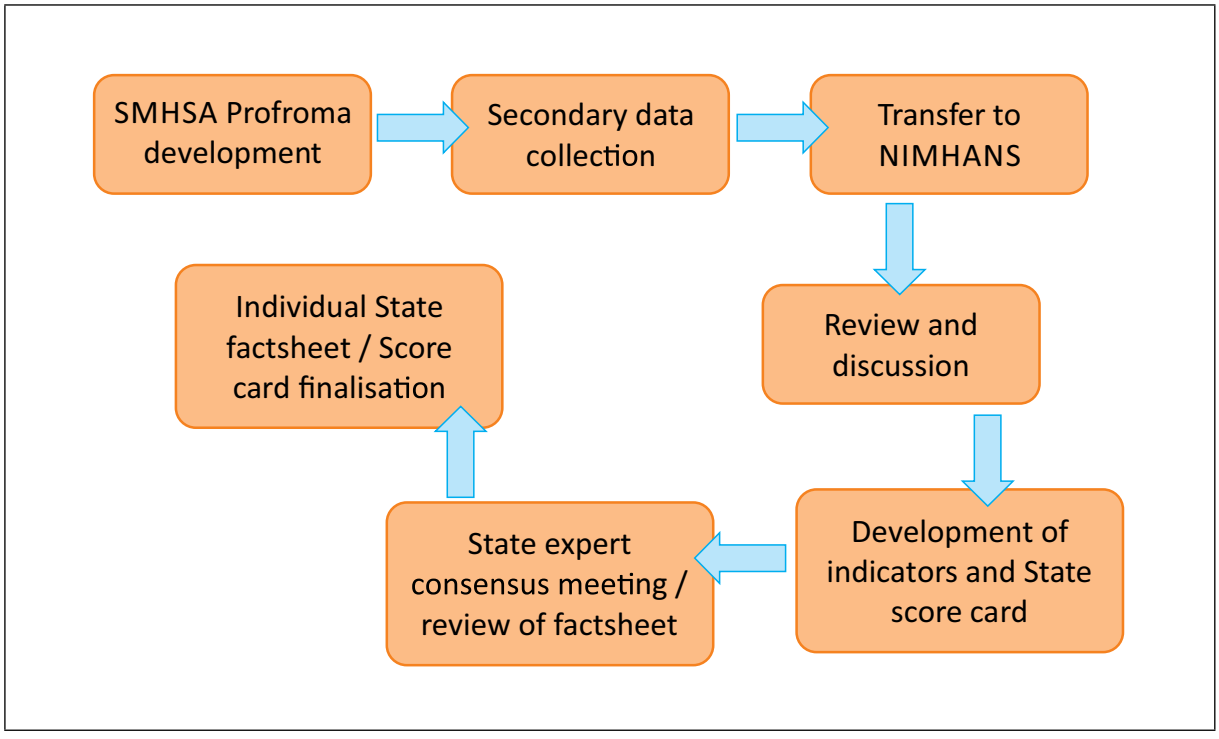
during the fortnightly monitoring e-meetings. The information thus collected was further discussed with NIMHANS team members, initially, during their visit to the individual states (December 2015 – January 2016) for review and monitoring of the progress of the NMHS data collection and later during the 3rdNational Collaborators meeting on 1st March 2016.

The SMHSA coordinator after duly completing the proforma forwarded it to the NIMHANS - NMHS team. Subsequent to the receipt of the SMHSA proforma, the NIMHANS Epi-team examined all the components and discussed them with the state teams to ensure the completion and reliability of the information of all the components within the proforma.This pre-final version of the proforma was returned to the PI of each state for his /her opinion and for further action.

In the pre-final version of the proforma sent to the states, different colour coding patterns were evolved to categorise the nature of the missing information- those areas coded in red indicated that information had not been provided or was left blank; those shaded in yellow indicated the newly added component that required completion; those marked in blue indicated the incompleteness of the information and/or that clarifications were required and areas marked in green indicated that consensus was required for the final steps to be taken.

The colour coded MHSA proforma was returned to the respective states for final whetting, checking of information and for arriving at a consensus on the State Mental Health System Assessment. In the end, if information was not available for specific items it was marked as not available (NA) and if information was not known it was marked as NK.The state PI and the MHSA Coordinator checked the state forms for coverage, completeness and reliability of the data received. The coordinator identified missing data points and made all efforts to

Figure 4: Overview of data collection process under SMHSA



obtain complete data of a good quality. The PI of the state reviewed the final version of the completed form, filled in missing information in totality, for review during the state consensus meeting.

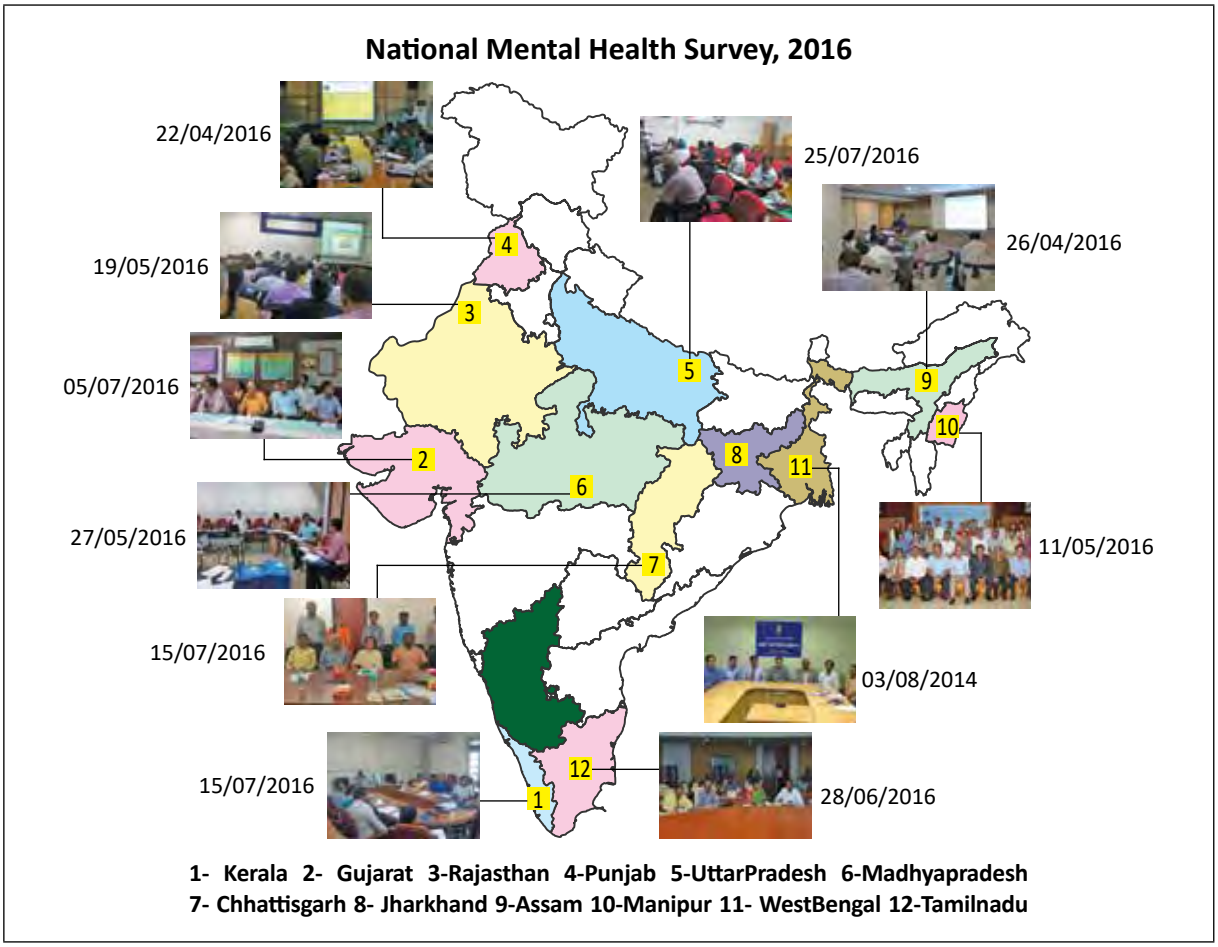
4.3.7 Development of Indicators

Indicators are specific, observable and measurable characteristics that are used to measure change (45). Indicators related to health systems would establish the baseline and facilitate tracking progress and performance of the health system over a period. Indicators developed for a specific purpose should be SMART (Sensitive, Measurable, Acceptable, Reliable and Timely) along with being valid Health system Indicator(s) should essentially give actionable information about the system and it is important to ensure that it should be feasible to collect information for computing the indicator value.

A set of 15 quantitative indicators, covering various domains was developed based on quantitative information collected by using the SMHSA proforma. Data drawn from the National Mental Health Survey was used to develop 5 morbidity indicators. These domains focused on the coverage of the DMHP, human resources for mental health, facility coverage for mental health, financing for mental health, burden of mental morbidity, treatment gap and incidence of suicides (Box 3).

A set of 10 qualitative indicators covering 10 essential domains of the mental health

Figure 5: Dates of State expert consensus meeting



system, based on a scoring pattern has been developed as qualitative indicators. These include mental health policy, plan of action, service delivery, availability of drugs, budget, IEC activities, legislation, inter-sectoral activities and monitoring of programmes. For each of the states, the score obtained for individual qualitative indicators were summed up to arrive at a composite score for that particular state. These scores were used to categorize the functional status of mental health systems that would form the basis for future assessment of the progress made by the system. The comprehensive list of quantitative and qualitative indicators together formed the score card for each of the states (Box 4). The detailed steps of indicator development and computation is provided in annexure 1

4.3.8 State Experts' Consensus Meeting

The purpose of the state level experts' consensus meeting was to have a broader discussion and better documentation of the mental health systems in the state, to review the collected information, to examine the indicators, to suggest changes/modifications and to agree on areas requiring further data inputs. The purpose was not to find flaws or loop holes, but to examine the mental health systems in a comprehensive, broad based manner and most importantly to set a baseline measure. Furthermore, where data for some domains / components were not available, an agreement / consensus had to be arrived at to provide an understanding as a first step.

NIMHANS provided a broad set of guidelines to conduct the state experts' consensus meeting. These guidelines highlighted the purpose, need, methodology, and the process of developing the SMHSA. In addition, the document spelt out a step-by-step action plan for these meetings that included the methodology / process of arriving ata consensus. Interestingly, majority of the states used this opportunity as a platform to review state level activities along with identifying action areas.

Based on the guidelines provided by the NMHS - NIMHANS team, the PI in consultation with the other members of the study team / state health authorities constituted a state level group to review the information provided in the proforma and to add any further information available. The experts (15 to 20 in number) participating in the consensus meeting varied across states and often included one or more of the following: State Principal Health Secretary or representative, State NHM Director or representative, State Mental Health Programme Officer, Member-Secretary of the State Mental Health Authority, psychiatrist(s) from both the private and public sectors, public health specialists, civil society members, legal advisors, a representative from the state IEC cell, etc. In addition to the above mentioned functionaries, the PI was encouraged to invite any expert who could make a contribution towards the discussions like the DMHP Programme Officers, heads or representatives of other departments, academicians, and researchers. A representative from the CPH, NIMHANS attended the state meetings as an observer and wherever needed facilitated the conduct of the consensus discussion.

Prior to the state consensus meeting, the PI made available the latest version of the complete proforma and the indicators list to the members. During the consensus meeting each of the components of the proforma was discussed in detail before arriving at a decision. The group deliberated, debated and discussed issues before reaching consensus on the ten core parameters of mental health systems.

Photos of State expert consensus meeting

Rajasthan

Chhattisgarh

Assam

Kerala

Manipur

Madhyapradesh

Gujarat

UttarPradesh

WestBengal

Tamilnadu

Punjab

4.3.9 Final Indicators and Score Card

Following the state consensus meeting, the PI of the respective states revised the contents based on discussions and submitted the final completed version of the SMHA proforma along with the recommendations arising from the meeting. The final set of documents (duly completed SMHSA proforma and the state score card with indicator values) were again checked by the NIMHANS team and data from the final version was used to refine indicators as well as the state score card. The indicators thus identified are listed below and this would form a baseline for all surveyed states to plan state level activities for the future. The individual factsheets of each states along with indicator are provided in annexure 2 - 13.

However, it is essential to highlight the fact that despite the best efforts of everyone, data was not available in some areas as information was not collected earlier or even if collected, was not available at the state level. Further, information from the private sector was totally unavailable in many areas (health care institutions, manpower, resources, etc.) due to the lack of information gathering mechanisms.

Box 4: MHSA Indicators

Quantitative indicators

1. General health facilities (Public and Private sector) in the state (nos / 100000 popln)
2. Health professionals/personnel available in the state (nos / 100000 popln)
3. Districts in the state covered by DMHP (%)
4. State population covered by DMHP (%)
5. Tribal population covered by DMHP (%)
6. Mental health facilities in the state (nos / 100000 population)
7. District/General hospitals in the state providing mental health services (%)
8. Taluka hospitals in the state providing mental health services (%)
9. PHCs in the state providing mental health services (%)
10. Beds available for mental health inpatient services in the state (Nos / 100 000 popln)
11. Mental health professionals/personnel in the state (Nos / 100000 popln)
12. Health professionals/personnel in the state who have undergone training in mental health in the last 3 years
13. Percent of total health budget allotted for mental health by state health department
14. Percentage of total allotted mental health budget that is utilized
15. Suicide incidence per 100000 population, by age and gender

Burden and treatment gap of mental morbidity

16. Prevalence & treatment gap of Common mental disorder
17. Prevalence & treatment gap of Severe mental disorder
18. Prevalence & treatment gap of Depressive disorder
19. Prevalence & treatment gap of Alcohol use disorder
20. Prevalence & treatment gap of High Suicidal risk

Qualitative indicators

1. Mental Health Policy
2. Mental health action plan and status of its implementation
3. State mental health Co-ordination mechanism
4. Mental health budget
5. Training programme on mental health
6. Availability of Drugs
7. Availability of IEC materials and implementation of IEC activities
8. Intra and Inter-sectoral collaboration for Mental health
9. Monitoring of mental health activities
10. Implementation status of legislation pertaining to mental health

5. Results

The National Mental Health Survey was undertaken across 12 states of India, during the period 2015 – 16. As per the methodology described in the earlier section, the state mental health system assessment was undertaken on 30 select parameters through quantitative and qualitative methods. Results are provided as summary information in each of the domains across states and individual state fact sheets are provided as annexures 2 – 13.

5.1 Population characteristics

Table 1: Demographic characteristics of states selected for NMHS

	North		East		South		West		North-east		Central	
	PB	UP	JH	WB	KL	TN	GJ	RJ	AS	MN	CG	MP
1. Population (in crores)	2.77	19.98	3.29	9.13	3.34	7.21	6.04	6.85	3.12	0.28	2.55	7.26
2. Sex ratio (females per 1000 males)	895	912	948	950	1084	996	919	928	958	985	991	931
3. Male population (%)	52.77	52.29	51.32	51.28	47.98	50.09	52.10	51.86	51.08	50.37	50.24	51.79
4. Female population (%)	47.23	47.71	48.68	48.72	52.02	49.91	47.90	48.14	48.92	49.63	49.76	48.21
5. <18 years age group population (%)	31.50	42.71	41.94	32.87	28.15	28.64	34.61	41.05	38.70	36.19	38.16	39.60
6. 60 years and above age group population (%)	10.33	7.73	7.14	8.48	12.55	10.41	7.92	7.46	6.66	7.00	7.84	7.87
7. Overall literacy rate (%)	75.84	67.68	66.41	76.26	94.00	80.09	78.03	66.11	72.19	76.94	70.28	69.32
7.1. Male literacy rate (%)	80.44	77.28	76.84	81.69	96.11	86.77	85.75	79.19	77.85	83.58	80.27	78.73
7.2. Female literacy rate (%)	70.73	57.18	55.42	70.54	92.07	73.44	69.68	52.12	66.27	70.26	60.24	59.24
8. Urban population (%)	37.48	22.27	24.05	31.87	47.70	48.40	42.60	24.87	14.10	29.21	23.24	27.63
9. Tribal population (%)	--	0.57	26.21	5.80	1.45	1.10	14.75	13.48	12.45	40.88	30.62	21.09

Source: Census 2011.

The population characteristics in Table 1 depict the overall macro level factors that are closely associated with and likely to influence the health and mental health of the state. The National Mental Health Survey was carried out in 12 states representing different regions in the country and covered nearly 60% of the country's population (71,85,94,525 out of 1,21,05,69,573) (46). The male and female population in all the surveyed states was nearly similar to the national levels (except Kerala where female proportion was higher than males). Overall, the average literacy rate was 74.41%, with the male literacy rate (82.02%) being higher than the female literacy rate (66.39%). Literacy rate varied from 66.1% in Rajasthan to 94% in Kerala. The tribal population ranged from none in Punjab to 40.9% in Manipur.

Table 2: Administrative and economic characteristics in NMHS states

	North		East		South		West		North-east		Central	
	PB	UP	JH	WB	KL	TN	GJ	RJ	AS	MN	CG	MP
1. Districts*	20	71	24	19	14	32	26	33	27	9	18	50
2. Districts as on 2016#	22	75	24	20	14	32	33	33	35	9	27	51
3. Taluka/Sub-district *	77	312	260	341	63	215	225	244	153	38	149	342
4. Villages*	12,581	1,06,773	32,394	40,203	1,018	15,979	18,225	44,672	26,395	2,582	20,126	54,903
5. Towns with 1 lakh to <1 million population*	16	57	8	27	11	28	26	27	7	1	7	29
6. Million plus cities*	2	7	3	2	7	4	4	3	0	0	2	4
7. Per capita income in 2013-2014 (in INR)$	92,350	36,250	46,131	70,059	1,03,820	1,12,664	1,06,831	65,974	44,263	41,573	58,547	51,798
8. Poverty Headcount Ratio$$	8.23	29.50	37.48	20.43	8.08	11.71	16.95	14.78	32.50	31.98	40.19	37.09

Note: *Census 2011; #-State Govt. websites (AS-http://assam.gov.in/ ; CG- http://explore-chhattisgarh.blogspot.in/2011/08/districts-of-chhattisgarh-18-existing-9.html ; GJ- http://www.gujaratindia.com ; MP- http://www.mpdistricts.nic.in/; PB- http://www.archive.india.gov.in/knowindia/districts/andhra1.php?stateid=PB; UP- http://www.archive.india.gov.in/knowindia/districts/andhra1.php?stateid=UP; WB-https://wb.gov.in/portal/web/guest/district); $-Central Statistical Organization; $$-NSSO 68th round - 2011-12.

The 12 states chosen for the survey were diverse with regards to their administrative and economic characteristics like number of districts, talukas, villages, per capita income and poverty headcount ratio (PHCR) (Table 2). PHCR is defined as the percentage of population whose living standards (usually measured using consumption as a proxy measure) lie below the poverty line. The PHCR in the surveyed states ranged as low as 8.08% in Kerala to 40.19% in Chhattisgarh.

5.2 Health Management Information System

Table 3: Health Management Information System (HMIS) in NMHS states

	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
Presence of HMIS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mental health included in HMIS	No	Yes	Yes	No	No	Yes	No	Yes	--	No	No	No
HMIS computerized	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Extent of computerization (%)	--	25-50	50-75	75-100	75-100	75-100	--	0-25	25-50	75-100	50-75	25-50

The Health Management Information System (HMIS), an integral part of the monitoring and evaluation of any health related programme, enables and catalyses evidence based planning and programming. It also facilitates timely monitoring and early decision-making. The paper versions of HMIS are now being replaced with computerised systems in more states.

All the NMHS states (except Assam) had an HMIS in place. The extent of computerisation of HMIS varied across the states and ranged from less than 25% in Punjab to nearly 100% in Jharkhand, Kerala, Madhya Pradesh and Tamil Nadu. Mental health was included as a part of existing HMIS in states of Chhattisgarh, Gujarat, Madhya Pradesh and Punjab (Table 3).

5.3 Health Care Facilities

The health care system in India is complex with respect to the ownership pattern and is broadly categorised into public or private owned systems. Private health care providers, both in urban and rural areas, predominantly cater to provision of ambulatory curative services. Across the states, the availability of health care facilities varied from 14.85per 1,00,000 population in Uttar Pradesh to 46.45 per 1,00,000 population in Chhattisgarh (rates influenced by population size) (Table 4). The availability of government facilities outnumbered the private facilities in the surveyed states, attributed to the presence of a vast network of sub-centres and primary health centres. This information has to be interpreted with caution as data from the private health care establishments was not available despite best efforts and could have contributed for variations.

Exceptionally, in the state of Punjab and Chhattisgarh private health care facilities are quantitatively nearer to the public health care facilities. With regard to tertiary care services, especially super specialty hospitals, privately owned facilities are the major service providers. With the significant presence of private facilities and in the era of public-private partnership, they are invaluable partners in meeting the health needs in our country. As complete information on private health care facilities is not readily available at one particular source due to the poor regulation of private facilities, they could have been underreported in this survey.

In the context of mental health and its integration into the general health system, the existing scenario is positive and provides an unique opportunity to ensure universal coverage of mental health. Since public agencies are primarily involved in the implementation of national programmes, opportunities exist for strengthening these agencies for prevention / promotion, care and management and rehabilitation of mental health. The engagement of the private sector, though critical, primarily for care and management can systematically be examined. The traditional systems of medicine despite high community acceptance, have not been systematically examined.

Table 4: General Health care facilities in NMHS states (per 1, 00,000 population)

Public sector	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
Population(n)	**31,205,576**	**25,545,198**	**60,439,692**	**32,988,134**	**33,406,061**	**72,626,809**	**28,55,794**	**27,743,338**	**68,548,437**	**72,147,030**	**199,812,341**	**91,276,115**
1. Super specialty hospitals	--	--	<0.01	0.02	0.02	<0.01	0.07	0.01	<0.01	<0.01	<0.01	0.04
2. Medical college hospitals	0.02	0.03	0.03	<0.01	0.03	<0.01	0.07	0.01	0.01	0.03	<0.01	0.02
3. District hospitals	0.08	0.09	0.05	0.07	0.11	0.06	0.24	0.08	0.05	0.04	0.07	0.02
4. Sub district/ Taluka hospitals	0.04	0.07	0.05	0.04	0.24	0.09	0.07	0.15	0.03	0.33	--	0.11
5. Community health centres	0.48	0.61	0.55	0.57	0.69	0.46	0.59	0.59	0.83	0.53	0.39	0.38
6. Primary health centres	3.29	3.09	1.99	1	2.55	1.61	2.97	1.87	3.05	2.42	1.75	0.99
7. Sub centres	14.81	20.30	12.04	11.99	16.17	12.65	14.74	10.64	21.02	12.06	10.27	11.35
8. Dispensaries	0.82	--	0.76	--	4.74	2.94	0.70	4.27	0.28	0.27	0.25	0.11
9. AYUSH hospitals	0.01	0.05	0.10	0.01	0.48	0.05	0.03	0.02	0.18	0.36	0.99	0.02
10. AYUSH dispensaries	1.46	4.71	1.35	1.03	4.73	3.22	9.87	1.83	5.66	1.97	1.00	2.24
11. ESI/CGHS hospitals	0.02	--	0.03	0.04	0.05	0.01	--	0.08	0.12	0.04	0.07	0.04
Health care facilities in public sector	**21.03**	**28.93**	**16.96**	**14.80**	**29.82**	**21.14**	**29.37**	**19.55**	**31.22**	**18.08**	**14.82**	**15.32**
Private sector												
1. Super specialty hospitals	<0.01	0.01	0.02	0.02	0.07	<0.01	0.10	0.26	<0.01	0.02	0.02	0.02
2. Medical college hospital(s)	0	<0.01	0.01	0	0.06	0.01	0	0.03	<0.01	0.03	0.01	<0.01
3. Hospitals	0.12	17.51	2.25	0.15	3.44	0.21	1.05	3.94	--	5.07	--	0.08
4. Nursing homes	--	--	0.86	--	--	0.32	0.03	10.82	--	2.82	--	0.08
5. Registered clinics	--	--	0.10	--	--	1.68	1.01	2.42	--	--	--	--
6. Non allopathic hospitals	--	--	--	--	--	0.28	0	0.62	--	--	--	<0.01
Health care facilities in private sector	**0.94**	**17.52**	**3.25**	**0.16**	**3.58**	**2.52**	**2.20**	**18.08**	**0.02**	**7.95**	**0.03**	**0.19**
Health care facilities (Public and Private)	**21.97**	**46.45**	**20.21**	**14.96**	**33.40**	**23.66**	**31.58**	**37.63**	**31.24**	**26.04**	**14.85**	**15.51**

Note: Refer to respective state factsheet for actual number of facilities in each category.

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

5.4 Health Human Resources

Table 5: Health human resources across the NMHS states (per 1, 00,000 population)

Types of Human resource	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
Population(n)	31,205,576	25,545,198	60,439,692	32,988,134	33,406,061	72,626,809	28,55,794	27,743,338	68,548,437	72,147,030	199,812,341	91,276,115
1. Specialist doctors *	8.41	0.94	1.12	0.22	8.30	2.32	22.69	4.72	5.18	5.15	1.95	6.67
2. Doctors – MBBS	20.39	5.00	5.96	5.44	17.54	6.78	28.50	11.24	11.49	15.73	5.40	64.35
3. AYUSH doctors	6.26	17.54	70.38	19.21	100.69	86.03	26.01	36.51	25.17	45.11	44.85	52.00
4. Registered Nurses and Midwives	59.30	30.73	164.00	7.13	645.71	149.88	192.69	276.39	256.08	327.33	21.33	61.49
5. Pharmacists	7.78	38.02	52.99	1.10	64.09	1.90	145.73	144.76	55.66	81.04	15.15	98.20
6. ANMs and LHV	77.70	36.68	67.33	12.77	30.19	23.00	112.75	92.32	155.42	93.05	12.76	78.74
7. Health worker (Male and Female)	40.41	35.28	21.03	23.18	33.97	24.62	47.02	21.76	26.20	14.20	13.45	22.74
8. ASHA / USHAs	98.12	258.37	40.99	124.81	94.44	88.27	140.38	69.04	69.10	3.55	78.09	--
Health Manpower in public sector	**318.37**	**422.57**	**423.82**	**193.87**	**994.96**	**382.82**	**715.80**	**656.76**	**604.34**	**585.16**	**192.98**	**384.18**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

The health workforce is the main backbone of the health care system. For effective delivery of comprehensive health care services, there is a need for a workforce, which is adequately sized and varied in composition (from grassroot workers like ASHA/ANM to specialist doctors). Due to varied reasons, information on the health workforce does not cover all categories and precise information is often absent. It must be highlighted here that many of the states were not able to provide information on the health workforce available in the private sector.

Health workforce density across states ranged from 192.98 per 1,00,000 population in Uttar Pradesh to 994.96 per 1,00,000 population in Kerala (Table 5). In five states of Kerala, Manipur, Punjab, Rajasthan and Tamil Nadu, the density of the health workforce was relatively higher as compared to rest of the states. ASHA/USHA ,ANM and Health workers (Male and Female) contributed significantly to the workforce density. These grassroot workers can optimally be utilised in delivery of preventive and promotive mental health care services with appropriate skill based training. The doctor (MBBS) density varied widely across states, with 64.35 per 1,00,000 population in West Bengal to 5 per 1,00,000 population in Chhattisgarh. Doctor density hovered between 5-6 per 1,00,000 population in states of Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh and Uttar Pradesh indicating lower density in these states in comparison to other NMHS states.

The shortage of mental health professionals (psychiatrists, psychologists and psychiatric social workers) is a well-known phenomenon and in this context, the existing health workforce has to be efficiently utilised to extend the coverage of mental health care across the country.

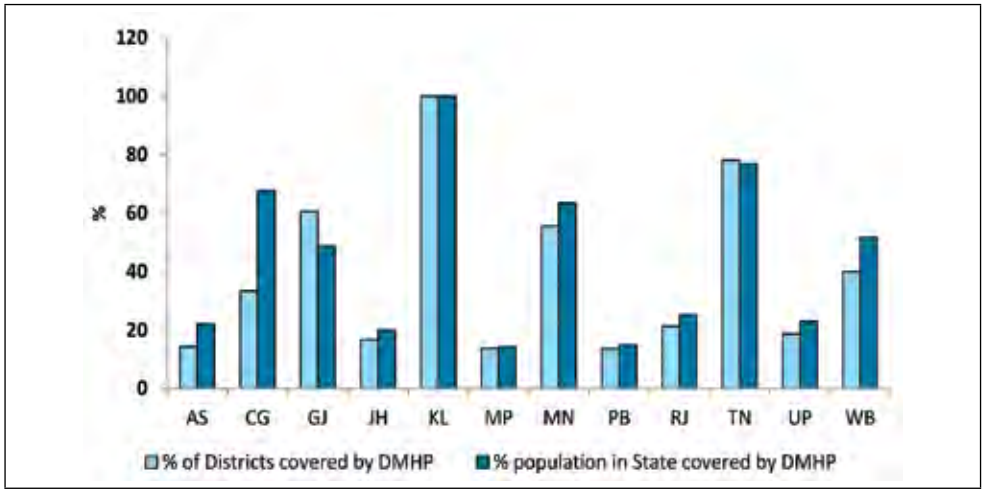
5.5 DMHP Coverage

Table 6: Coverage of DMHP across the NMHS states

Coverage of District Mental Health Programme(DMHP)	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
1. Districts with DMHP implemented in 12th plan period*(n) 2012-17	0	6	12	0	6	2	0	0	6	9	8	4
2. Districts with DMHP implemented prior to 12th plan (n)	5	3	8	4	8	5	5	3	1	16	6	4
3. Districts covered by DMHP# (%)	14.29	33.33	60.61	16.67	100	13.73	55.56	13.64	21.21	78.13	18.67	40.00
4. Population covered by DMHP (%)	22.08	67.74	48.68	19.90	100	14.20	63.50	14.94	25.23	76.92	23.01	51.78
5. Tribal population covered by DMHP (%)	15.16	47.27	59.59	24.40	100	19.05	37.40	NA	13.96	63.48	3.99	56.45

Note: * Between 2012 and January 2016; NA- Not applicable; # newly sanctioned DMHP districts in 2016 are not included.

Figure 6: State wise DMHP districts covered in NMHS



The District Mental Health Programme (DMHP) has been the implementation arm of the NMHP and has been an ongoing programme since 1996. However, the proportion of districts covered by the DMHP ranged from 13.64% in Punjab to 100% in Kerala as on 2015 Table 6 and Figure 6). However, Tamilnadu has expanded the programme to all districts in 2016. In 8 out of the 12 NMHS states, less than 50% of the districts have been covered under the programme. Correspondingly, the population covered ranged from 14.9 % in Punjab to 100% in Kerala. On a similar note, only 1/3rd of the surveyed states has more than 50% of the population covered by the DMHP. The percentage of the tribal population covered also varied across the states. Coverage levels are reminiscent of the slow progress in scaling up the mental health programme since last 2 decades. Still considerable population across NMHS states are yet to be covered under the DMHP.

5.6 Mental Health Care Facilites and Resources

• Mental health care facilities

Table 7: Mental health care facilities in NMHS states

	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
1. Mental hospitals	1	2	6*	3	3*	2	0	1	2	1	3*	6*
2. Medical colleges with psychiatry department	6	6	14	1	7	14	2	7	5	20	28	7
3. General hospitals with psychiatry units	3	16	20	2	18	6	3	29	--	16	16	11
4. Mobile mental health units	--	--	4	--	22	--	--	--	--	432	--	--
5. Day care Centres	4	--	9	4	43	2	--	--	--	137	--	4
6. De-addiction units / Centres	6	49	17	2	66	7	24	38	6	120	--	30
7. Residential half way homes	1	--	7	1	--	--	4	--	--	43	--	9
8. Long stay homes	9	--	1	2	146	--	--	--	--	7	--	5
9. Hostel (quarter stay homes)	--	--	1	--	--	--	1	--	--	--	--	--
10. Vocational Training centres	2	26	9	2	10	2	4	--	1	17	--	5
11. Sheltered workshops	--	3	5	2	6	--	--	--	--	--	--	3

Note: * One mental hospital is upgraded to centre of excellence in mental health i.e., (Institute of Mental Health & Hospital, Agra, Uttar Pradesh; Hospital for Mental Health, Ahmedabad, Gujara; Institute of Psychiatry- Kolkata, West Bengal; IMHANS, Kozhikode.

Persons with mental illnesses seek care from a wide variety of agencies based on the nature and severity of their condition as well as their preferred agency of choice. In view of this, mental health services in the community are expected be organized at three different

levels *viz* primary, secondary and tertiary care. The health care facilities identified above (Table 7) provide curative and rehabilitative services in the states surveyed; however, data from the private sector in some areas (like rehabilitation centres and deaddiciton centres) was not available.

In general, health care facilities that provided specialist mental health and rehabilitative services are available across all the surveyed states with a few exceptions. There is at least one mental hospital in all the surveyed states, except in Manipur. All the 12 states have atleast one medical college with a psychiatric department, a general hospital with a psychiatric unit and at least one de-addiction centre. However, there was no information on number of general hospitals with a psychiatry unit in the State of Rajasthan. Though some degree of mental health care facilities existed in all the surveyed states, they were minimal in number, possibly maldistributed thereby resulting in limited accessibility to those who need them the most. The private health sector comprised of 8% of healthcare facilities in 1949 and has increased to 93% of the hospitals and 85% of the doctors by end of the 11th Plan (47). Despite multiple attempts in compiling the data, complete and accurate information on mental health facilities was not available. This was more so for support services.

Apart from the major mental health care facilities, mobile mental health units, de-addiction centres, OPD services in PHCs and taluka hospitals, and other rehabilitation related set-ups were considered as "Other Mental Health care facilities" in the SMHSA (Table 7). It was observed that there were 458 mobile mental units and 382 de-addiction centres providing mental health services in the 12 states. Tamil Nadu reported that nearly 1750 PHCs were providing OPD services.

• Mental health human resources

Psychiatrists, clinical psychologists and psychiatric social workers play an effective

According to the World Mental Health Atlas (2014), there were 0.3 psychiatrists per lakh of population in India. Psychologists and psychiatric social workers were even fewer. The average national deficit of psychiatrists was estimated to be 77% (48). In developing countries with acute shortages of mental health professionals, the delivery of mental health services through general health care is considered as the most viable strategy for increasing the access of underserved populations to mental health care.

With the limited availability of mental health human resources and mental health care facilities across the surveyed states, there is a compelling need to evolve alternative strategies to address the burden of mental illness. Even though past experiences like the Raipur Rani Experience and the Bellary model for mental health care delivery have demonstrated the feasibility of such attempts and have been recognised by the Government of India over time, large scale replication has been limited due to operational reasons. Apart from the requisite measures to increase mental health personnel and facilities, the existing general health care facilities and their vast human resources should be optimally utilised for providing mental health care.

role and are key resources in mental health care delivery. However, there is great diversity in the availability of such resources across Indian states. The limited availability of such mental health personnel has been a major barrier to guaranteeing essential mental health care to all. Furthermore, it must be noted that information on core mental health personnel and supportive service providers from the private sector was not readily available and the numbers reported across states should be interpreted with caution.

According to the World Mental Health Atlas (2014) (12), there were 0.3 psychiatrists per lakh of population in India. Psychologists and psychiatric social workers were even fewer. The average national deficit of psychiatrists was estimated to be 77% (48). In developing countries with acute shortages of mental health professionals, the delivery of mental health services through general health care is considered as the most viable strategy for increasing the access of underserved populations to mental health care.

The availability of psychiatrists in the NMHS states varied from 0.05 per lakh population in Madhya Pradesh to 1.2 per 1,00,000 population in Kerala. Data available for some of the high income countries indicate this number to be between 1-2 per 1,00,000 population. Except for Kerala, all the other states fell short of this requirement.

Among the surveyed states, Kerala had the highest number of clinical psychologists (0.63 per lakh population) and Tamil Nadu had the highest number of nurses trained in mental health (10.5 per lakh population) (Table 8). Among the core mental health professionals, the availability of psychiatric social workers was relatively low across all the NMHS states. Clearly, Madhya Pradesh lagged behind in terms of mental health human resources among all the surveyed states.

With an emphasis on integrating mental health into the general health care system, mental health training was earlier imparted to medical doctors in all primary health centres. Varying degree of progress have been documented with respect to the training of medical doctors. This can be noted from the fact that excepting for Manipur (9.73 per 1,00,000 population), in all other states there were very few trained medical officers for treating persons with mental illnesses. In Jharkhand no such information was available. Compared to developed countries, the number of mental health personnel across the surveyed states was grossly inadequate.

Apart from mental health professionals, there is a dire need for supportive manpower because many of the mental health problems are chronic & recurrent in nature and need rehabilitative services. In many states, information on rehabilitation workers, special education teachers and paraprofessional counsellors was not available. Wherever available, it was found to be grossly inadequate to meet the current needs.

• Training in mental health

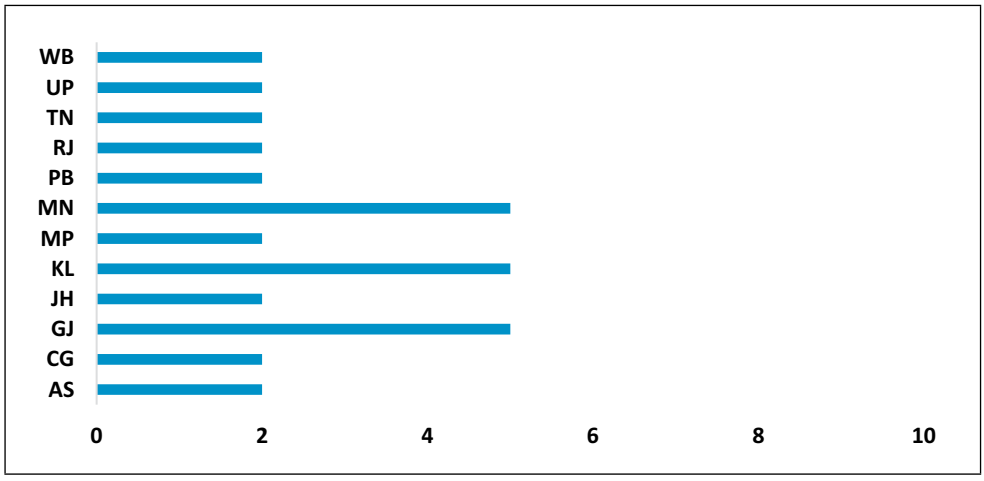
Human resources are the most valuable assets of mental health services. An optimum number of personnel and an equitable distribution of specialists and non-specialists trained in mental health care are vital for the delivery of mental health services in India. The coverage of doctors trained in mental health was low in all the states, with a slightly better position in manipur, kerala and Gujarat (Figure 7)

Table 8: Mental health human resources across the NMHS states (per 1,00,000 population)

	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
1. Psychiatrists	92 (0.29)	37 (0.14)	318 (0.53)	103 (0.31)	400 (1.20)	37 (0.05)	16 (0.56)	127 (0.46)	68 (0.10)	214 (0.30)	297 (0.15)	506 (0.55)
2. Medical doctors trained in mental health	100 (0.32)	21 (0.08)	242 (0.40)	--	917 (2.75)	39 (0.05)	278 (9.73)	380 (1.37)	398 (0.58)	1334 (1.85)	220 (0.11)	2500 (2.74)
3. Clinical psychologists*	20 (0.06)	17 (0.07)	14 (0.02)	19 (0.06)	211 (0.63)	11 (0.02)	14 (0.49)	12 (0.04)	9 (0.01)	68 (0.09)	49 (0.02)	42 (0.05)
4. Nurses trained in mental health	168 (0.54)	7 (0.03)	936 (1.55)	--	818 (2.45)	33 (0.05)	215 (7.53)	3 (0.01)	6 (0.01)	7555 (10.47)	60 (0.03)	18 (0.02)
5. Nurses with DPN qualification	42 (0.13)	5 (0.02)	39 (0.06)	63 (0.19)	--	--	6 (0.21)	--	6 (0.01)	--	14 (<0.01)	12 (0.01)
6. Psychiatric Social workers	22 (0.07)	22 (0.09)	58 (0.10)	8 (0.02)	15 (0.04)	7 (0.01)	19 (0.67)	32 (0.12)	6 (0.01)	37 (0.05)	44 (0.02)	110 (0.12)
7. Rehabilitation workers and Special education teachers	193 (0.62)	235 (0.91)	685 (1.13)	18 (0.05)	3429 (10.26)	--	171 (5.99)	--	--	1911 (2.65)	--	229 (0.25)
8. Professional and Paraprofessional psychosocial counsellors	--	127 (0.50)	499 (0.83)	39 (0.12)	931 (2.79)	--	1754 (61.42)	288 (1.04)	--	1153 (1.60)	--	407 (0.45)

Note: DPN- Diploma in Psychiatric Nursing; number in parenthesis indicate rate per 1,00,000 population; (*) - Information obtained from Indian Association of Clinical Psychologists and other sources.

Figure 7: Training programme for mental health



Tamil Nadu had the maximum number of institutions (19) providing postgraduate course in psychiatry followed by Kerala (15) and Uttar Pradesh (12), while no institutions were available for MD (psychiatry) training in Chhattisgarh. The yearly intake across training institutions in these NMHS states ranged from nil to 52 per year.

Institutions from Gujarat, Kerala, Jharkhand, Tamil Nadu, Uttar Pradesh and West Bengal are reported to have trained over 100 MD (psychiatry) professionals during the last five years. (Table 9).

Table 9: Mental health sciences training in the NMHS states

Course	AS	CT	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
MD Psychiatry[1] (No. of Institutions)	4	0	10	2	15	5	1	4	9	19	12	8
Intake per year[1]	11	--	25	10	32	9	3	11	24	52	25	18
Number trained in last 5 years	80	--	100	100	100	--	5	35	--	124	120	100
Diploma in Psychological medicine(DPM)[1] (No. of Institutions)	2	0	6	3	5	0	0	0	0	6	2	1
Intake per year	4	0	11	19	11	--	--	--	--	17	2	10
M.Sc. Psychiatric Nursing [2] (No. of Institutions)	3	6	7	1	37	23	0	26	7	37	8	7
Intake per year	22	40	32	3	164	95	0	108	31	156	37	30
M.Phil. Clinical Psychology [3] (No. of Institutions)	1	1	1	2	1	1	1	0	1	4	6	2
M.Phil. (Psychiatric social work)* (No. of Institutions)	1	1	--	2	1	--	--	--	--	3	1	1
Social work* (No. of Institutions)	1	--	5	--	19	3	--	1	2	23	3	2

Source: 1- Medical Council of India, 2-Indian Nursing Council, 3-Rehabilitation council of India; * Information has been obtained from various sources.

To bridge the treatment gap, an increase in quantity, quality and coverage of training capacities across the country, in an equitable manner, is required along with the strengthening of the capacity of general health services to provide mental health care at the primary level. Though most states reported the presence of formal training programmes in mental health care, they covered less than 50% of the districts. Gujarat and Manipur reported the presence of training programmes for primary care staff in all or more than 50% of the districts in these states.

5.7 Mental Health Policy

The presence of a mental health policy approved by the legislature at national and state levels indicates the vision and path way for developing mental health services over time. India has a national mental health policy which was rolled out in 2014 (49). The states will need or may decide to adapt the national mental health policy or have a standalone policy or at times, integrate mental health with other policies of education, welfare, housing, etc. In the 12 NMHS states, Gujarat and Kerala both reported having an independent state mental health policy. West Bengal has a policy for psychiatric rehabilitation in state run mental hospitals (Table 10).

All other state reported that they were following the National Mental Health Policy Undoubtedly, each state needs to have a written and approved mental health policy given the burden of mental health problems currently prevalent in the respective state.

Table 10: Mental health policy across the NMHS states

	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
State developed standalone Mental health policy	--	--	✔	--	✔	--	--	--	--	--	--	--
Year implemented	--	--	2004	--	2013	--	--	--	--	--	--	--
State adapted National mental health policy	--	--	--	--	--	--	--	--	--	--	✔ #	--
Mental health included in other sectors policies	--	--	✔	--	✔	--	--	--	--	✔ **	--	✔ ***

Note:** Medical education, medical and rural health; *** Draft policy for psychiatric rehabilitation of long staying patients in state run mental hospitals, 2010, #-As per DGHS there is an adopted policy.

5.8 Mental Health Action Plan(s)

The state mental health policy needs to be followed up by a state mental health action plan. The state mental health action plan should include a specified set of activities, individual components of these activities, a responsible agency for implementation, budgetary allocation for activities, defined time lines and monitoring mechanisms. The activities under the action plan can vary from place to place and can include,

i. Treatment (pharmacological / non pharmacological)for mental disorders in health care settings (PHCs / CHCs / taluka or sub-district hospitals)

ii. Ensure that psychotropic drugs are available throughout the year in PHCs / CHCs / sub-district hospitals on a continuous and uninterrupted basis

iii. Provide follow up care / domiciliary care in the community

iv. Educate the public / IEC activities

v. Implementation of specific legislations

vi. Training / Sensitisation programme for (doctors, ANM, health workers and other health care professionals

vii. Conduct programmes with other sectors/ departments like education, women and child development, social welfare, law and justice, welfare on selected topics

viii. Mental health care preparedness plan during disaster/emergency(separately or as part of the National Disaster Management Authority Activity plan)

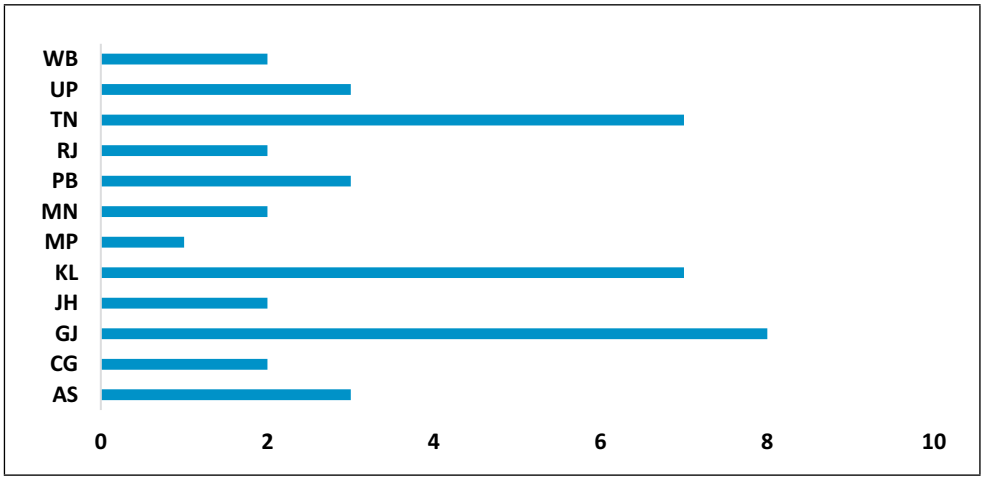
ix Periodic or regular monitoring of all activities

x. Periodical discussion with community / local leaders, spiritual / traditional healers or with affected families in implementing mental health services

xi. Support planning and undertaking research

Among the NMHS states, the states of Tamil Nadu, Gujarat, Kerala and Assam had some type of an action plan as revealed by available documents (Figure 8). Although, these plans seem to be incomplete in terms of clarity and direction, it is an essential and a significant first step towards mental health care delivery. In the expert consensus meetings in all the states, a strong desire and need for a state specific action plan was expressed.

Figure 8: Mental health action plan



5.9 State Mental Health Coordination

The Mental Health Act, 1987 (50) mandates the setting up of a Mental Health Authority in each state to advise the state governments on all matters relating to mental health and is in charge of regulation, development and co-ordination with respect to mental health services in the state. Consequent to the failure of several states to establish the State Mental Health Authority, the Supreme Court issued a directive to set up the same. Since then there has been significant progress in the setting up of such authorities across different states. The state of chhatisgarh constituted the State Mental Health Authority only in january 2016 and the authority is yet to meet.

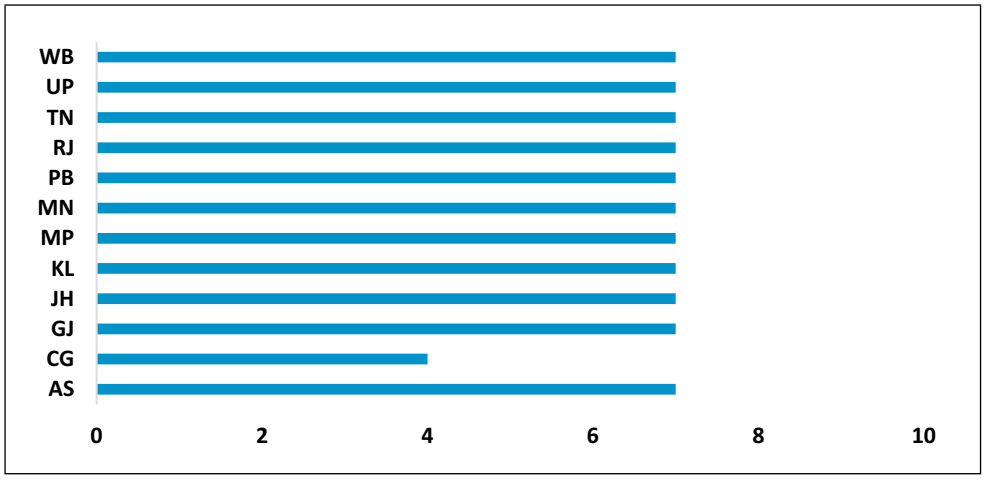
As per the draft Mental Health Rules, 1990 (51), the State Mental Health Authority is to meet once in six months. In all the states, meetings were held in the past year and the discussions mostly focused on the implementation of the Mental Health Act and issues relating to licensing and broad basing of the agenda of the SMHSA. Owing to regulatory mandate most states scored well in domain of mental health coordination mechanisms (Figure 9). *However it is important to examine activities pertaining to linkages and coordination within and across different departments for mental health service delivery.*

State level meetings extending beyond services for severe disorders and that include prevention, promotion of mental health and related matters are urgently needed. This mechanism is further strengthened in the new Mental health Bill (2016) (52), which requires evaluation in the coming years.

For overall mental health program at state level, there is a need for a larger coordination mechanism between state authority, state programme officer, departments of health and medical education as well as other sectors. within the health sector and also

in the health related sector which would take into account all required activities for the development and implementation of programmes covering mental health promotion, care and management as well as the rehabilitation of persons with mental illnesses. Such a mechanism was not visible in any of the surveyed states.

Figure 9 Mental health coordination mechanism



5.10 Inpatient Care for Mental Disorders

Mental hospitals are considered as remnants of the past. In India, despite advances in mental health treatment and decades of initiatives towards the integration of mental health care into general health services, the legacy and movement against custodial care has not gained sufficient momentum. The chronically mentally ill and the homeless mentally ill continue to be patients, and / or residents in the 43 mental hospitals across the country. Mental hospitals have until recently been characterised by gross deficiencies in infrastructure along with human rights concerns (32,33).

Nearly 6,829 patients were staying in various mental hospitals across the 12 surveyed states as on 31st Dec 2015, of which 2245 (33%) were in Madhya Pradesh. Nearly 16% of the total in-patients in mental hospitals were reported to have been 'staying for more than 5 years'. Manipur did not report in-patient psychiatric patients. Community residential facilities for mental health care were not reported in any of the states except in Gujarat where 161 patients were accommodated through other mechanisms.

• Reported Burden of Mental Disorders

As per the NMHP guidelines, all the districts in respective states are expected to report regularly the number of new patients registered, on follow-up and referred for four conditions (Psychoses, Neurosis, Epilepsy and Mental Retardation). However, information collected varies across states and includes a few other disorders as well. These numbers are included in the HMIS of the states depending on its current status of implementation. It is anticipated that this information would be pooled at the state level and also reported to the central Ministry of Health. Specific reporting formats of a uniform nature are being used for this purpose at district and state level. This information is expected to be used for various activities in the absence of an independent monitoring system.

Information provided by States revealed that during the year 2015 the number of persons currently on treatment ranged between 8,446 in Kerala to 8,50,000 in Gujarat (Alcohol use disorders - 11.7%, Neurotic disorders - 76%). The proportion of psychoses patients ranged from 6.4% in Punjab to 35.7% in Tamil Nadu.

The burden of different types of mental disorders for most States based on routine HMIS is not presize as the HMIS provides data on persons seeking mental health care in public health system only. The burden of different types of mental disorders for Chhattisgarh, Jharkhand, Madhya Pradesh, Uttar Pradesh and West Bengal is not known, indicating that the HMIS systems for mental disorders is either not present or not standardised.

5.11 Mental Health Legislation

Table 11: Implementation of mental health legislation across the NMHS states

	Mental Health Act	Protection of Human rights Act	Narcotic Drugs & Psychotropic Substances Act	Rehabilitation Council of India Act	Persons with Disabilities Act	Juvenile Justice Act	National trust for welfare of persons with Autism, CP, MR and Multiple Disabilities act-year	Protection of women from Domestic violence Act
AS	++	+	+/-	+	+	+	+	+
CG	+	+	+	+	+	+	+	+
GJ	++	++	++	++	++	++	++	++
JH	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
KL	++	+	+	++	++	++	+	++
MP	+	+	+	+	+	+	+	+/-
MN	+	+	+	+	+	++	+	++
PB	++	++	++	+	+	++	+	++
RJ	+	+/-	+	+	+	+/-	+/-	+/-
TN	++	++	++	++	++	++	++	++
UP	+	+	+	+	++	+	+	+
WB	++	++	++	++	++	++	++	++

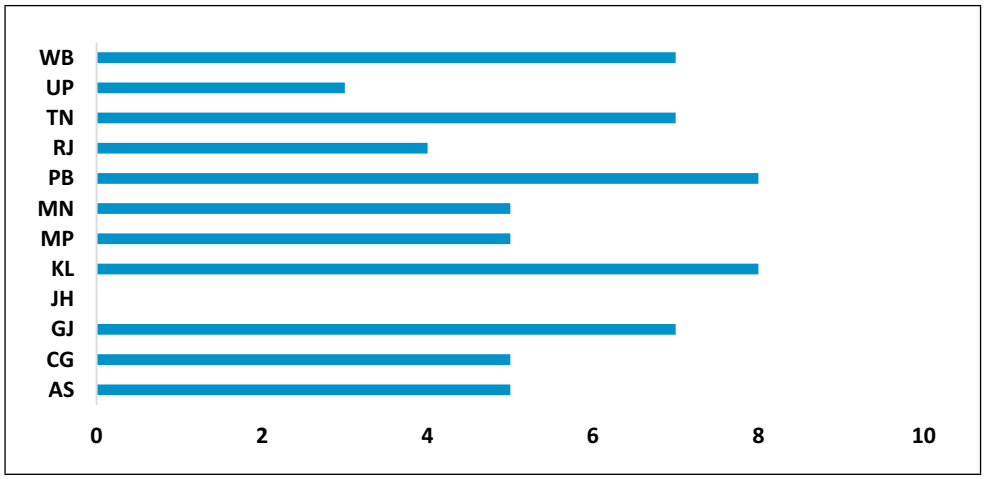
Note: (++) Implemented to large extent; (+) Implemented to some extent, (+/-) Can't say

Legislations are powerful tools to reduce contributory risk factors leading to mental health problems at a macro level. Among the NMHS states almost all states reported implementing the named mental health related legislations "to some extent". Gujarat, Tamil Nadu and West Bengal reported that all the mental health related legislations were implemented to a large extent.

The Mental Health Act, the Juvenile Justice Act and the Domestic Violence Act are legislations which are implemented 'to a large extent' in most states. Implementation to some extent was reported by some states with regard to human rights protection for those with mental illnesses and the narcotic drugs and psychotropic substances act. Punjab, Kerala, Tamil Nadu, West Bengal and Gujarat fared comparatively better in enacting and implementing mental health related legislations (Table 11, Figure 10).

For the effective implementation of any legislation, apart from the need for a defined legislation, there ought to be established mechanisms for implementation, capacity building of all stakeholders, adequate financial allocation for implementation and monitoring of the implementation on a continuous basis along with reaching the unreachable in the entire state. Although the states reported implementation of these legislations, no formal or informal evaluation reports were available to examine their coverage, efficacy and effectiveness and the final scores may not be a true reflection of the situation.

Figure 10: Implementation status of legislation



5.12 Mental Health Financing

"Mental health financing is a powerful tool with which policymakers can develop and shape quality mental health systems. Without adequate financing, mental health policies and plans remain in the realm of rhetoric and good intentions'(WHO, 2003) (53).

Financing is a critical factor to translate mental health plans and policies to field level implementable health programmes. Yet, the budget for mental health is less than 1% of the total health budget in India. At the state level, financing for mental health is usually from a combination of funds from the Central Government (Ministry of Health and Family welfare, GOI), the Dept. of Health and Family welfare and the Dept. of Medical Education (State contribution). Health is a state subject and a dedicated state level budget for mental health with clear mention of budget lines does not exist as of now, but is necessary for the implementation of mental health programmes.

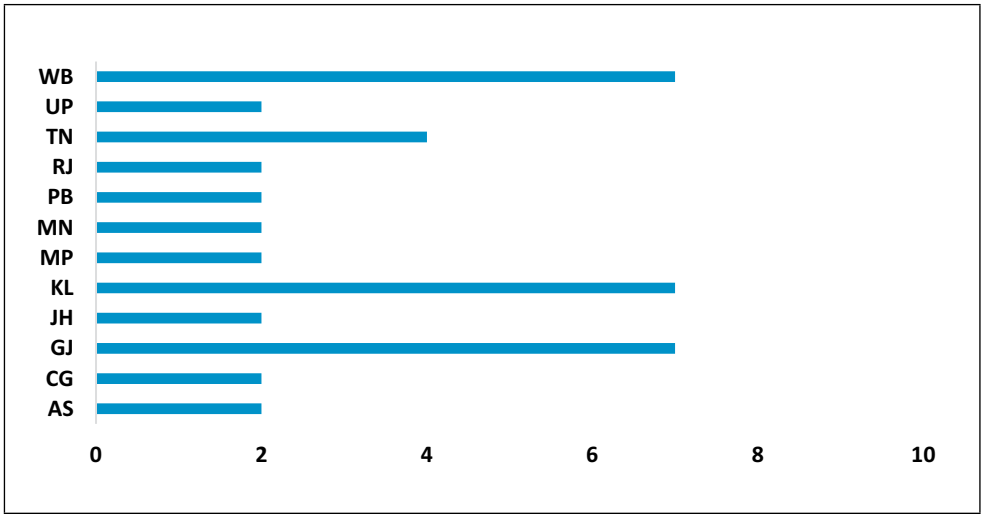
With mental health included under NCDs, budgetary provisions under the NCD flexi pool may help to improve the budget outlay for mental health. Mechanisms for timely disbursement, specification of activities and utilisation under specific budgetary heads at the state level need to be streamlined.

Only the states of Gujarat and Kerala reported the presence of a separate budget head for mental health. The total budget available for mental health across the states was less than 1% in most states (Figure 11).

The financing of mental health faced problems in the areas of – allocation, untimely

distribution, inadequate utilisation and lack of clarity on utilisation mechanisms. Most of the allocated budget for mental health was spent on staff salaries and the procurement of medicines. The utilisation of the allocated budget was not reported by most states indicating a lack of clarity in programme planning and implementation, which is a bigger concern than non-availability of funds. Gujarat and West Bengal reported utilization of 71% and 83% of allocated funds.

Figure 11: Mental health financing



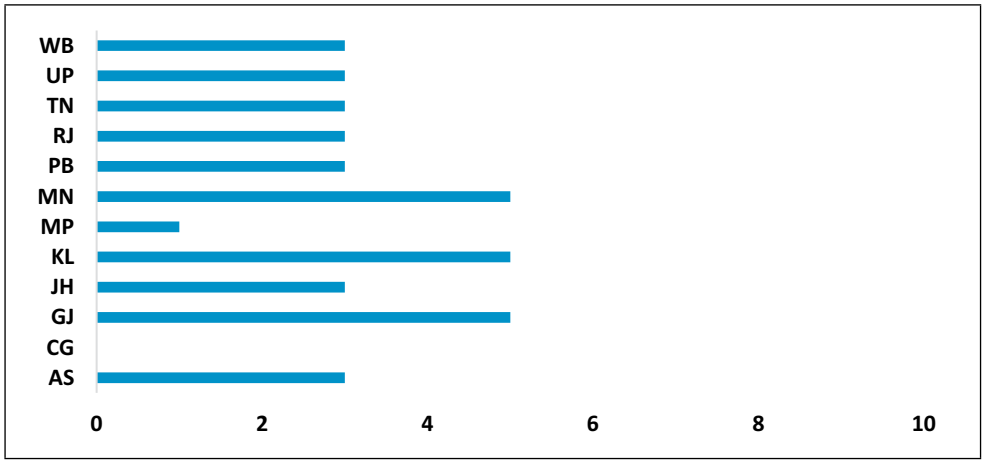
5.13 Health Education Activities in Mental Health

Information, Education and Communication (IEC) activities are essential components of any health programme. In the context of mental health, the need for IEC activity is exemplified by low mental health literacy, prevailing stigma, availability and utilisation of services and all these have an adverse effect on health seeking behaviour for mental health problems.

Assessment of IEC materials and health education activities at the state level revealed that IEC material were available in local languages. IEC activities were carried out in >50% of the districts in the states of Kerala and Gujarat, while they were used in less than 50% of the districts in Tamil Nadu, Assam, Manipur and Punjab. Limited IEC activities were reported from Madhya Pradesh, Jharkhand and Uttar Pradesh and none in chhatttisgarh (Figure 12).

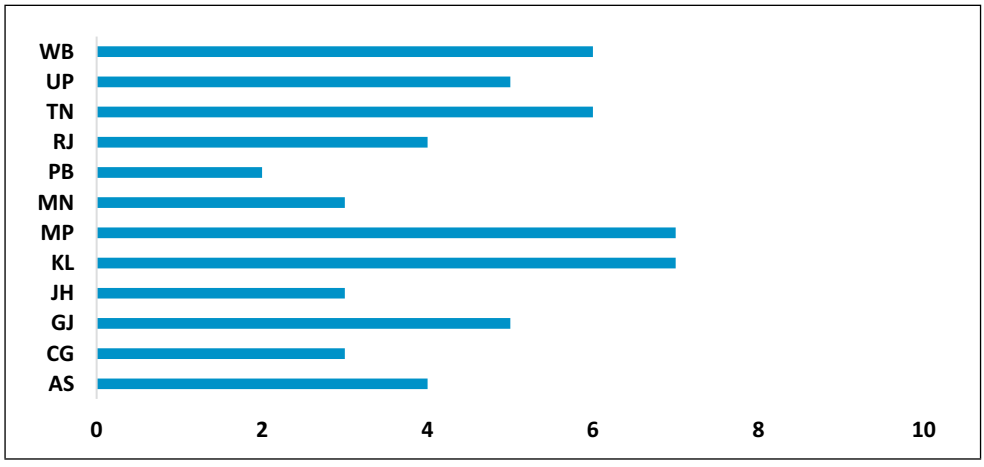
IEC activities are usually carried out using traditional methods like pamphlets, posters, videos and supplemented with general education material along with traditional methods of songs, dramas, newspaper and television articles and stories. In addition, in recent times social media has emerged as a mass media channel for IEC. The present assessment revealed that only posters and pamphlets were available and even these were used infrequently for IEC. Most of the other channels of communication were not used and there was no state specific plan for these activities. IEC activities need to be population centric, targeted in nature, uniform in coverage, highly visible, continuous over time and should be a part of larger state IEC activities.

Figure 12: IEC materials and health education activities



5.14 Availability of Drugs

Figure 13: Availability of Drugs



Drug logistics management is a systematic and scientific process of planning, implementing and controlling the efficient and effective flow and storage of drugs from the point of origin to the point of consumption. It seeks to provide the right drugs, in the right quantities, at the right time and to the right places. An uninterrupted supply of drugs is critical for effective outcomes for persons with mental and neurological disorders.

Drug logistics management was examined at three levels in the SMHA assessment and a scoring pattern was evolved (Figure 13). It included the availability of all essential drugs for mental health care (as per the Government of India essential drug list) (54), at the different levels of health care institutions (district, taluks/ CBD and primary health centres; medical colleges were excluded) and their availability throughout the year on an uninterrupted basis.

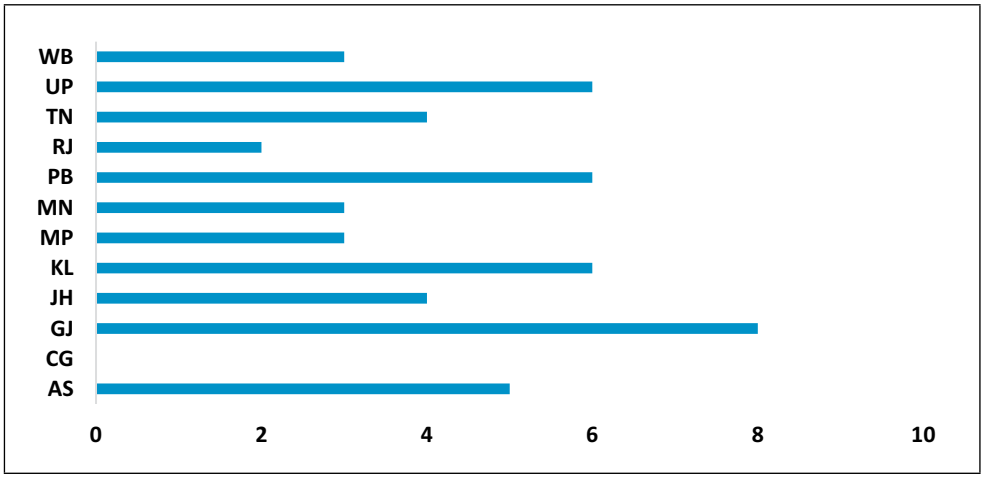
States like Chhattisgarh, Assam, Gujarat, Jharkhand and Rajasthan, reported the availability of mental health drugs 'always' for more than 75% of the above listed drugs. States like Madhya Pradesh and Tamilnadu had availability of nearly 68% of the listed drugs. Drug availability was disrupted for a few of the drugs in states like Manipur and West Bengal (Annexure 14).

Drug availability at the PHC level is necessary for the meaningful integration of mental health services. Gujarat and Tamil Nadu reported the availability of all drugs at the PHC level while Rajasthan reported availability of only Alprazolam and Diazepam at the PHC level. Mental health drugs were available in private pharmacies in all the states.

Issues of budgeting at the state level, tendering centralised procurement of drugs, ceiling on drug procurement at the primary health facility level, indenting, internal transfer, stock maintenance, inventory control are some of the major problems (varying from state to state) that need to be addressed and standardised across states to ensure the uninterrupted supply of mental health drugs.

5.15 Intra and Inter-Sectoral Collaboration

Figure 14: Intra and Intersectoral collaboration



Collaboration is essential if the outcomes of mental disorders are to be improved. The needs of persons with mental illnesses are complex and cut across different sectors. It is unlikely that the health sector alone can meet all the needs for health and social care. Collaboration is needed both within the health sector (intrasectoral collaboration), and outside the health sector (intersectoral collaboration).

In recent times, the need for inclusion of mental health in other national health programmes like Reproductive and Child Health, National HIV/Aids Control Programme, NPCDCS, NHPCE, has been steadily gaining momentum. Apart from implementing welfare schemes, activities related to intersectoral collaboration such as sensitisation, training of personnel, ensuring referral services, providing counselling services, sharing of information, joint monitoring, etc. should be included. The above cannot function properly if coordination mechanisms, guidelines and directives are not in place.

Collaboration with the non-health sector includes one or more of the following: social welfare (issuing disability certificate / disability pension) employment (reservation in jobs for those with mental disorders) housing (preferential allotment in housing), civil society (advocacy and rights issues), education (imparting life skills education, counselling, teachers trained to identify

and refer children with mental health or behavioural problems to the concerned health professionals etc.), Law (mental health legislations), police (ensuring protection) and other sectors.

More than 72% of the states surveyed, reported that there existed activities of some type pertaining to intra and inter-sectoral collaboration for mental health at the state level, but not in a defined and structured manner; it was predominantly activity oriented and need based. Five states (Gujarat, Manipur, Kerala, West Bengal and Punjab) had collaboration with more than 50% of the health as well as the non-health sectors (Figure 14). Collaboration was usually reported with departments of differently-abled people/ disability, HIV/ AIDS and social welfare. Formal intra and inter sectoral collaboration agreements, guidelines, information and services exchange, and referral services need to be evolved to make inter-sectoral coordination meaningful.

• Social welfare activities

Social welfare activities for mentally disabled persons in terms of the provision of disability certificates, pensions, reservation of jobs and the preferential allotment of housing was assessed in the surveyed states. Disability certificates usually help the mentally ill to avail of various disability benefits provided by the government. Assam, Chhattisgarh, Jharkhand, Uttar Pradesh and West Bengal had no information on the provision of disability certificates.

Disability certificates issued for mental illness ranged from 14 in Manipur to 7.48 lakhs in Gujarat. Reservation of jobs for mentally ill persons and the preferential allotment of housing were reported only in Gujarat.

• Civil society organisation (s) in mental health

The term civil society refers to the wide array ofnon-governmental and not-for-profit organisations that have a presence in public life, expressing the interests and values of their members or others, based on ethical, cultural, political, scientific, religious or philanthropic considerations. Civil Society Organisations (CSOs) therefore refer to a wide array of organisations: community groups, non-governmental organisations (NGOs), indigenous groups, charitable organisations, faith-based organisations, professional associations, and foundations" – World Bank, 2013 (55)

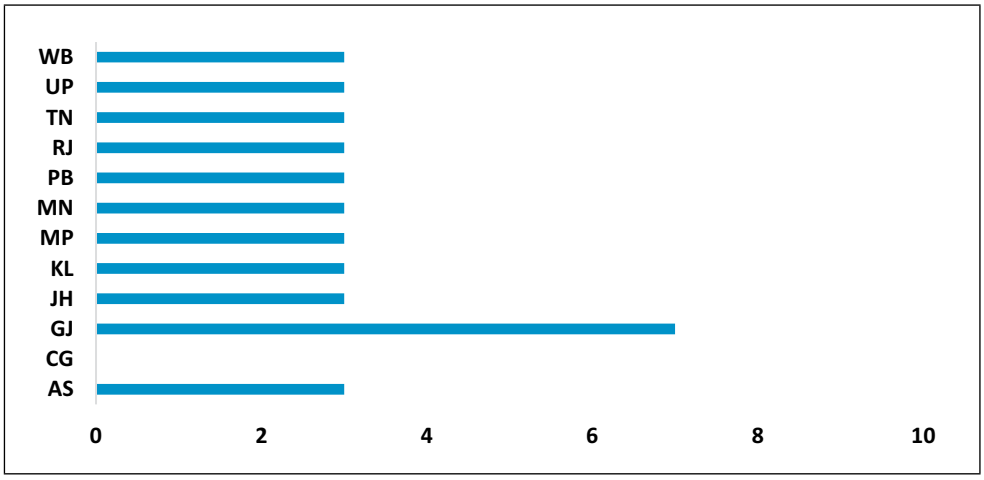
Civil society organisations play an effective role in the areas of stigma removal, advocacy for mental health, rights protection of the mentally ill, service related activities and even research.

Historically, CSOs in mental health have focused on the rehabilitation of mentally retarded children. A few organisations like SCARF (56) Alcoholics Anonymous (57), Sneha Banyan (58) and Sangath (59) are well known in the area of mental health and have contributed significantly in diverse concerns of mental health. There are organisations, both for profit and not-for profit working in areas like mental retardation. In spite of the best intentions and the diverse areas of service, the population coverage by NGOs is limited due to several reasons, the chief being resource constraints.

Nevertheless, mapping of NGOs in the respective states is useful for mental health service delivery, mental health advocacy and awareness generation. Mental Health NGOs were reported to be functioning in all the states that were surveyed excepting in Jharkhand. Nearly 69 NGOs were reported to be prominently functioning in the area of mental health.

5.16 Mental Health Monitoring

Figure 15: Monitoring



Monitoring and evaluation are the twin pillars of a successful public health programme. Monitoring and evaluation are key processes that determine whether the goals set in the mental health policy and action plan are being realised and also for allowing decision-makers to make long and short term service and policy related decisions and changes. The current mental health programmes in India are hampered by the lack of valid, reliable, timely, sensitive and specific outcome indicators for mental health.

Monitoring mechanisms as it exists today, was examined under the state mental health system assessment. The availability of a published report on mental health by the respective state was considered as an indicator of monitoring. The report should have essentially contained information on resources for mental health, the burden of mental health problems (overall burden and condition wise break up), referral statistics, budget related problems including finance availability and its utilisation, mental health human resources, health professionals' training, functioning of mental hospitals, services available for patients with mental health problems, health education activities conducted, etc.

Among the states surveyed for the NMHS, the state of Gujarat reported publishing periodical reports specifically on mental health activities covering both the private and government sectors during the last two years. Eight of the surveyed states had compiled mental health data for inclusion into the general health statistics during the last two years (Figure 15); however, no specific reports were available. Monitoring at the individual state level is limited to providing information on the number of cases registered for treatment (mainly psychosis, neurosis, mental retardation and epilepsy) to the programme managers at the state level. It does not cover key inputs, process and outcome indicators covering activities pertaining to mental health care, financing and awareness.

5.17 Mental Health System Performance across States

Based on the scoring of individual areas, a final score was arrived at for each state (Figure 16). It is essential to note that these scores are stand-alone values for each state and are not meant for comparison as each state is at a different stage of growth and development; however it helps in learning from each other.

The assessment revealed that steady growth in all domains was not seen in each of the states. The progress in states like Gujarat, Tamil Nadu and Kerala were much better than in others. All states failed to achieve reasonably good status on all parameters, but had made progress in independent areas.

Figure 16: State Mental health system assessment scores

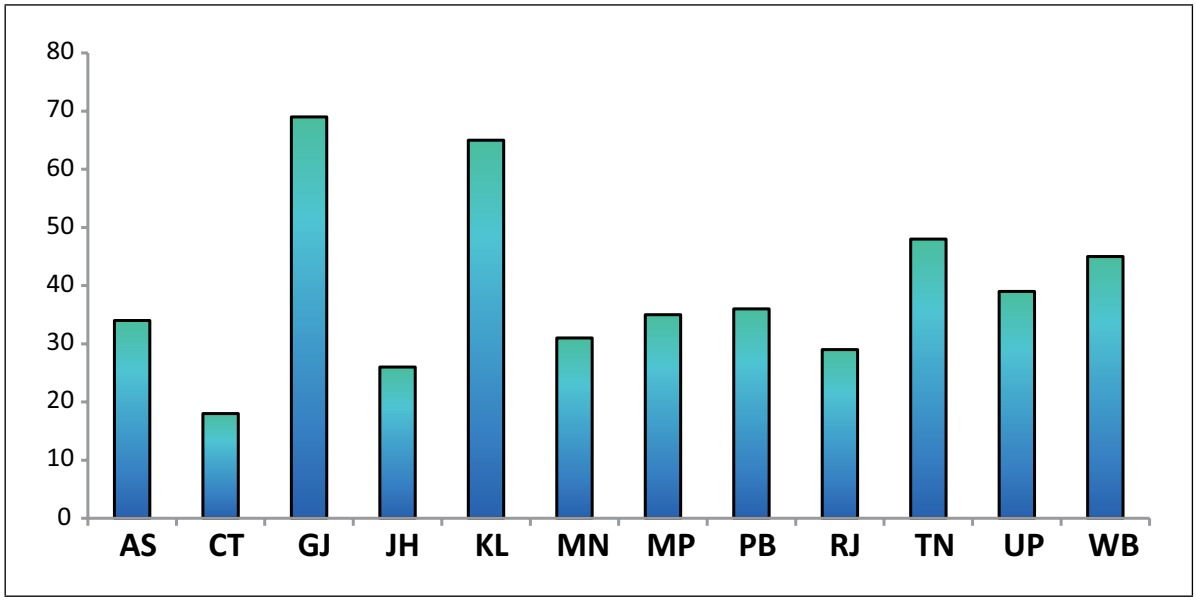


Figure 17: SMHSA Scores - Assam

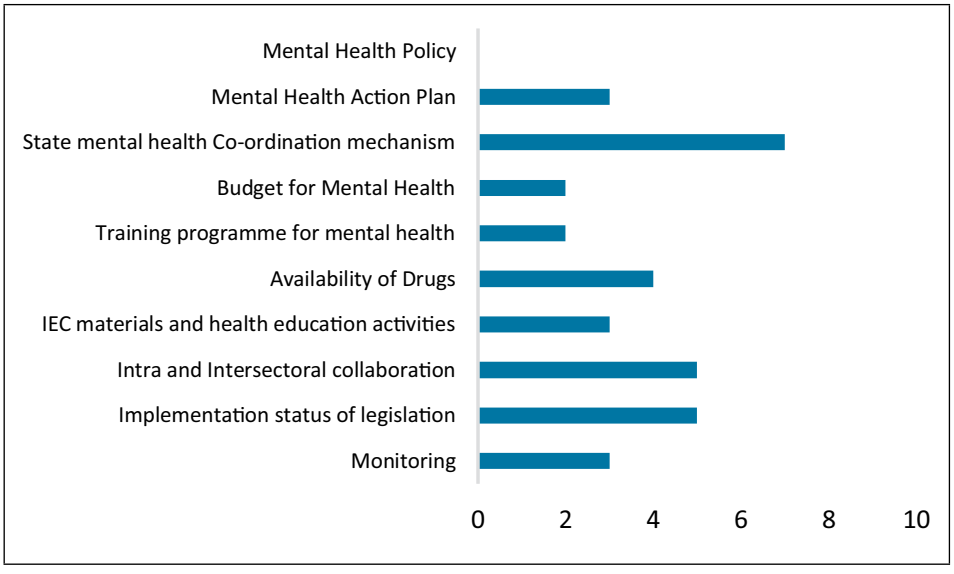


Figure 19: SMHSA Scores - Chhattisgarh

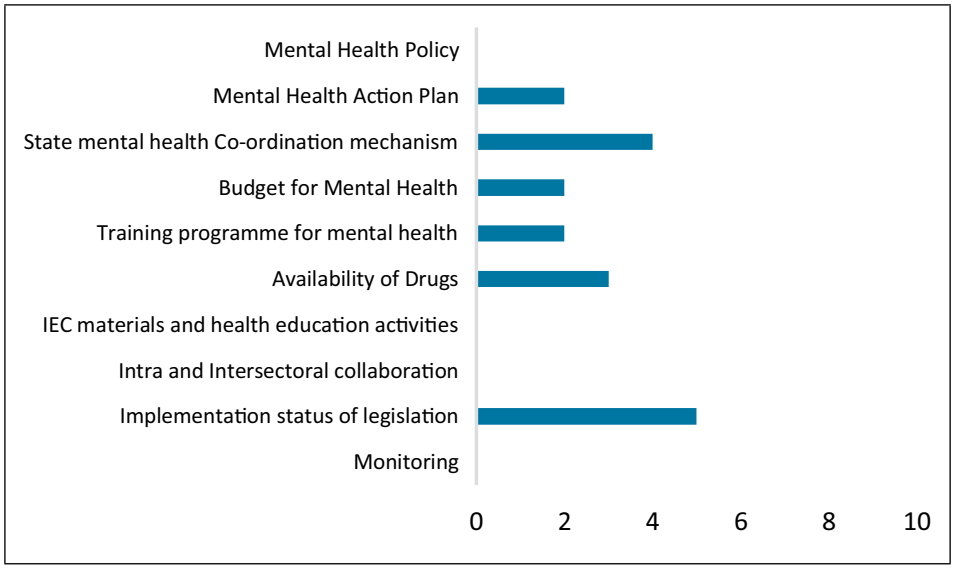


Figure 18: SMHSA Scores - Gujarat

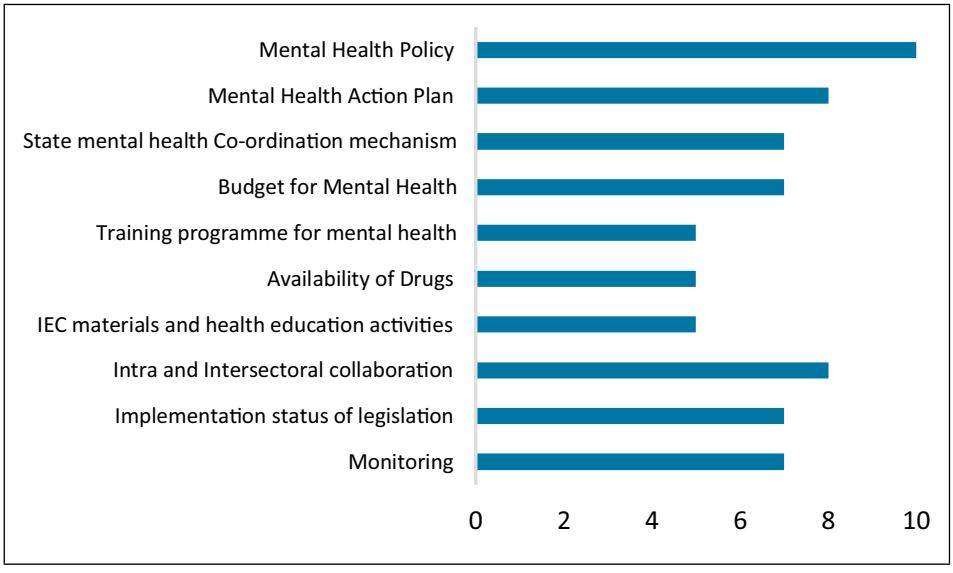


Figure 20: SMHSA Scores - Jharkhand

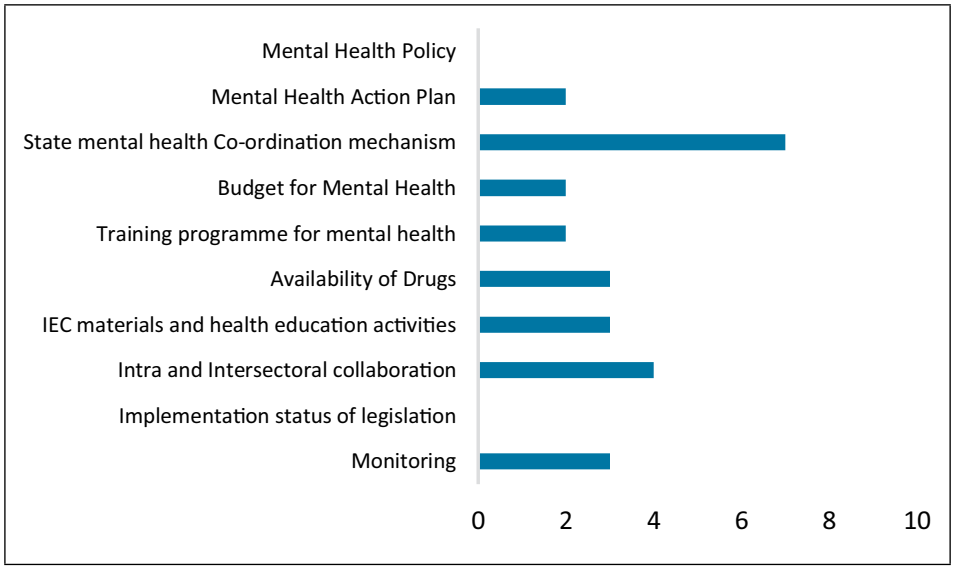


Figure 21: SMHSA Scores - Kerala

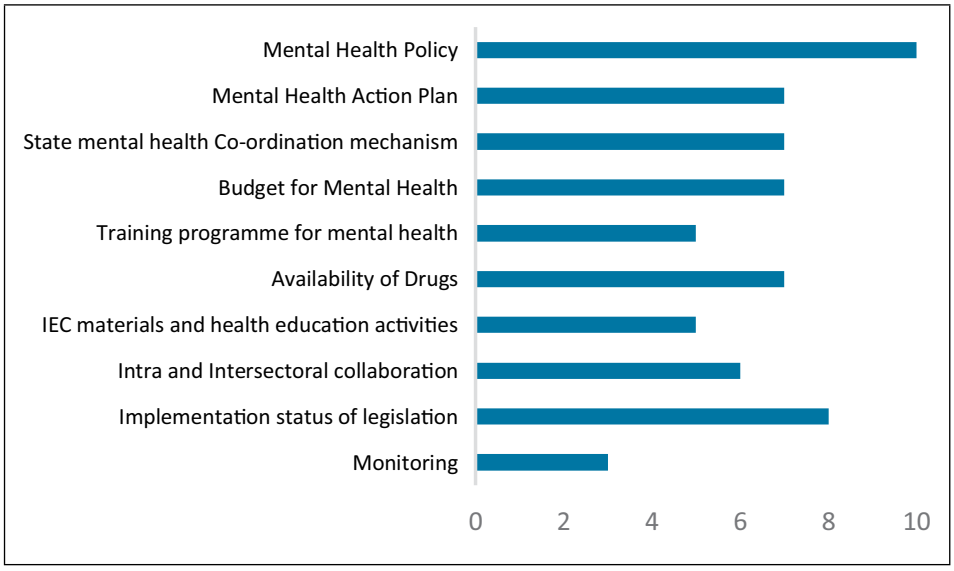


Figure 23: SMHSA Scores - Madhya Pradesh

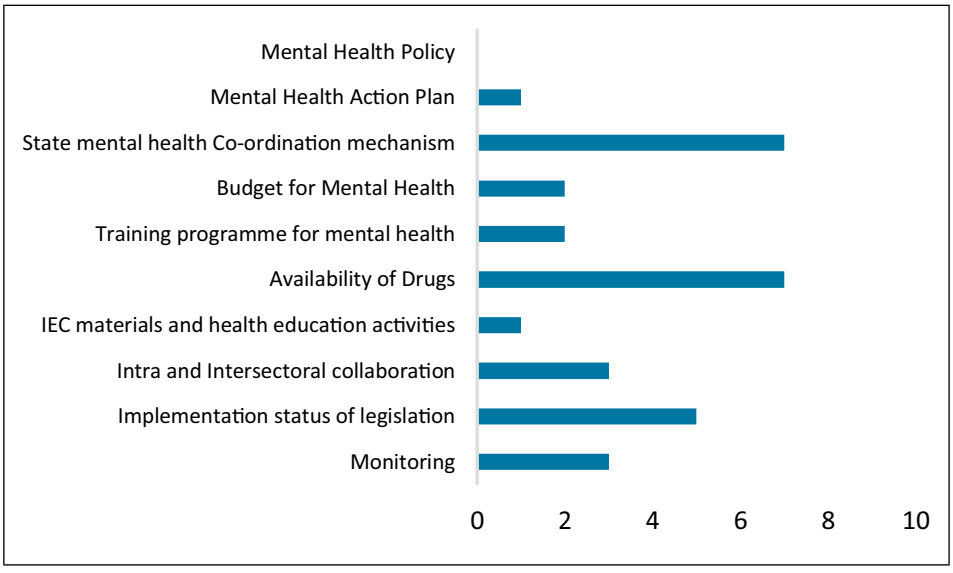


Figure 25: SMHSA Scores - Manipur

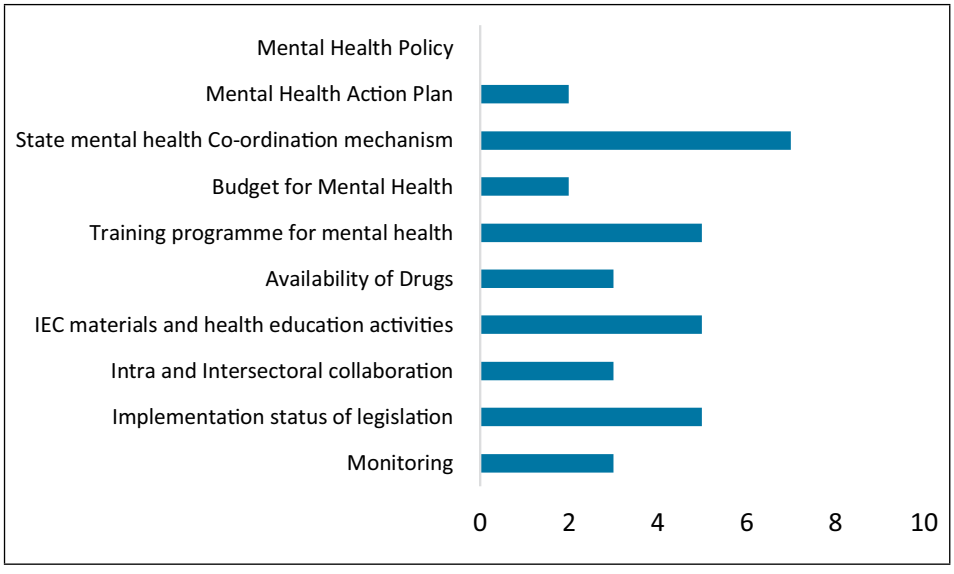


Figure: 27: SMHSA Scores - Punjab

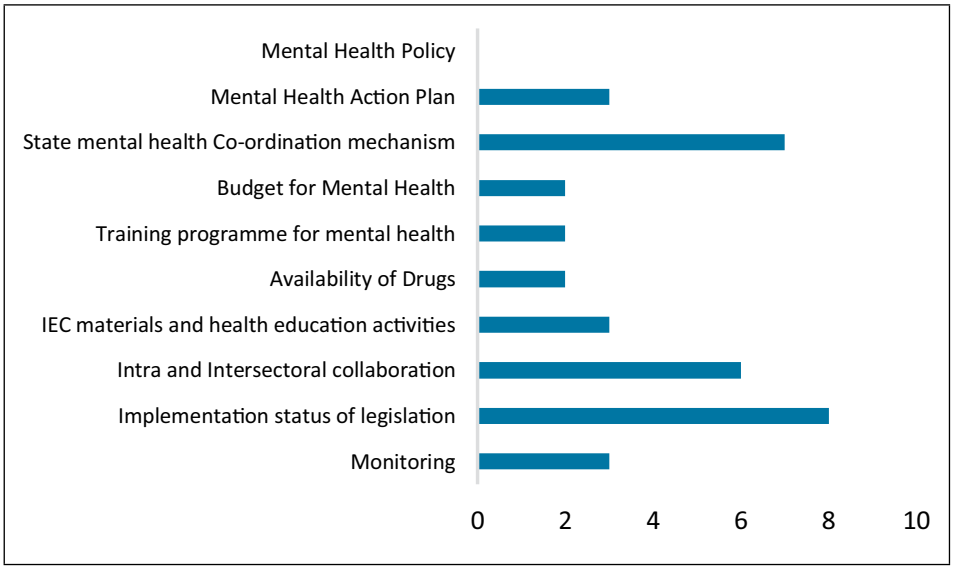


Figure 22: SMHSA Scores - Rajasthan

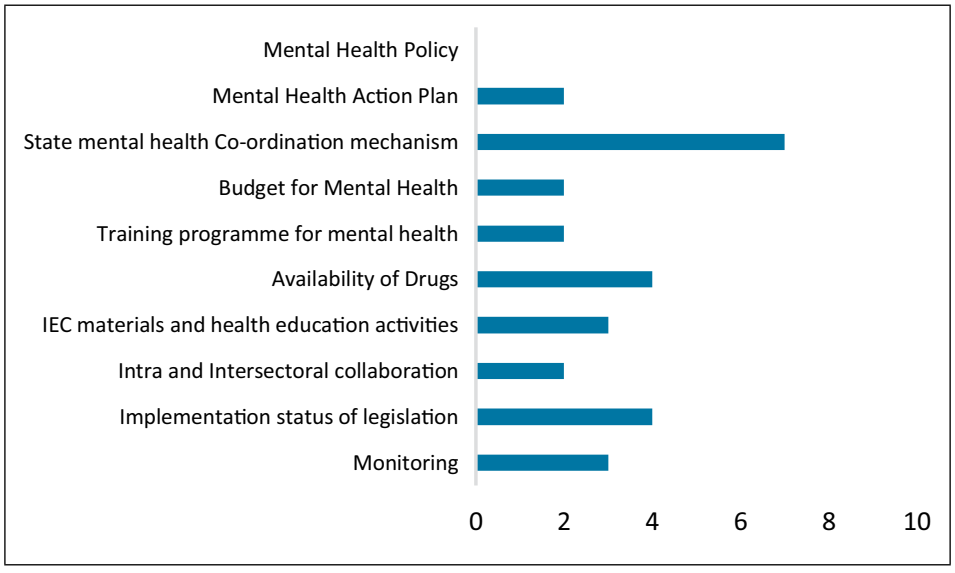


Figure 24: SMHSA Scores - Tamil Nadu

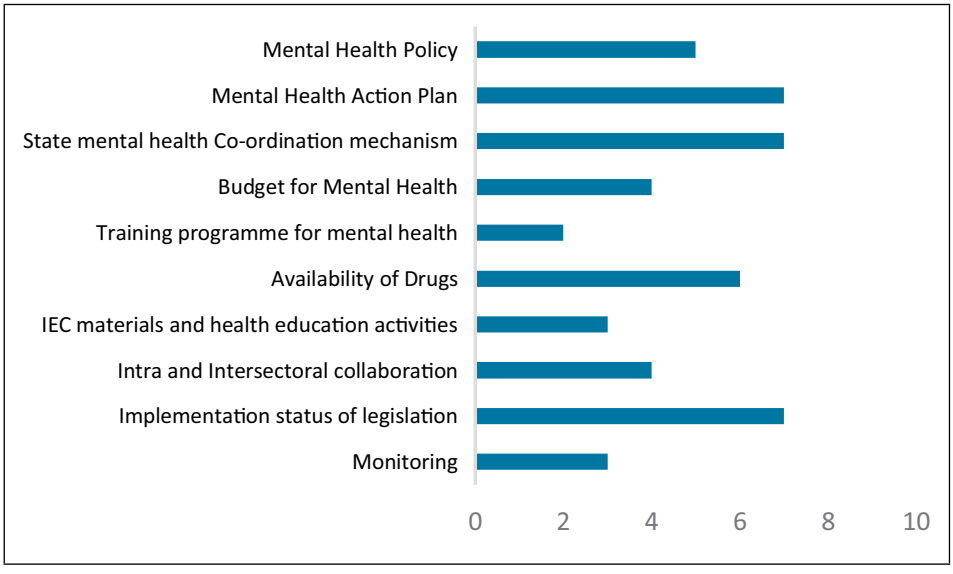


Figure 26: SMHSA Scores - Uttar Pradesh

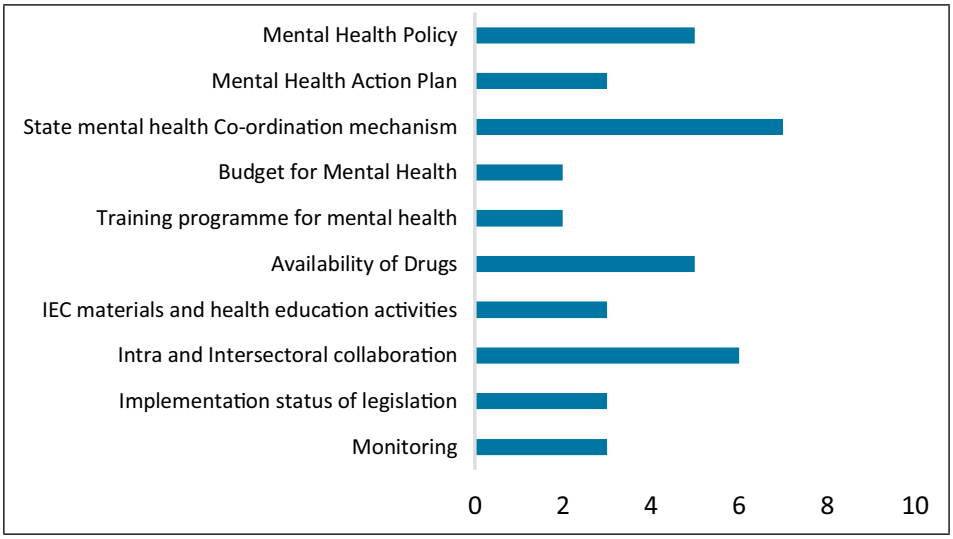
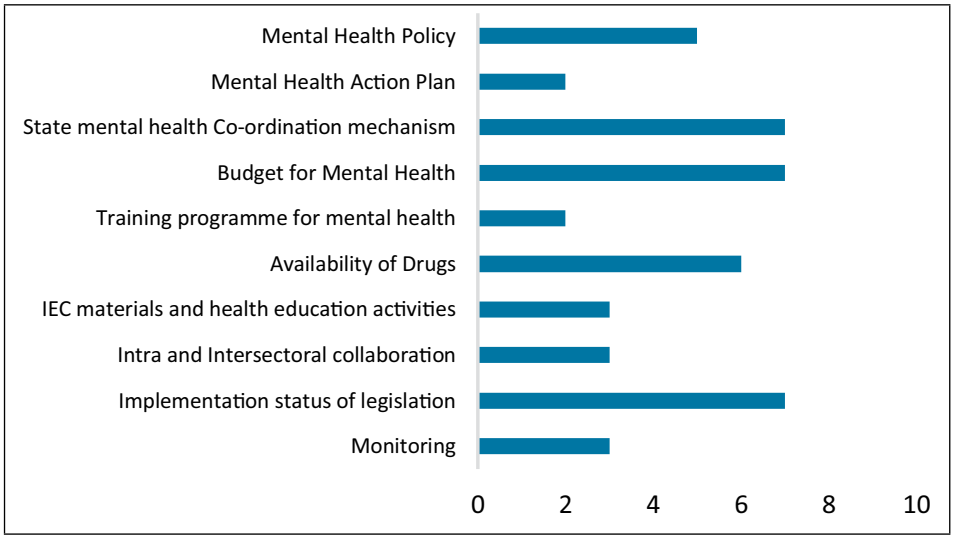


Figure: 28: SMHSA Scores - West Bengal



Innovations lead the way.... Assam

The Integrated care for the needs of vulnerable persons with severe mental disorders (INCENSE) program

The INCENSE program is a novel partnership between two mental health institutions (LGBRegional Institute of Mental Health,Tejpur and Regional Mental Hospital,Pune) and non-governmental organizations (Parivartan and Sangath). The programme specifically targets people with severe mental disorders like long stay persons within hospitals, homeless persons and people with severe mental disorders living in the local communities.

The activities include development of vibrant local networks with community agencies to supportcommunity housing, employment and livelihoods options on a large scale, centred around the needs of individuals within and outside of the hospital. Community based rehabilitation services areprovided by trained lay recovery support workers who are the key for continuity and responsiveness for care. The program has facilitated the growth of a robust peer and caregiver's network who are involved as care providers and members of self help groups with clear plans for long term collective action and advocacy. The programme is currently under expansion to more districts.

6. Implications

The National Mental Health Survey 2015-16 had the triple objective of (1) estimating the prevalence and delineating the patterns of mental disorders in a representative population of India, (2) identifying the treatment gap, health care utilisation, disability nature and impact (3) assessment of mental health systems across the surveyed states of India.

The population based survey was undertaken in 12 states, 43 districts, 80 sub-districts / talukas, 720 clusters, 10152 households and 34,802 individuals was based on uniform and standardised methods to obtain prevalence and patterns. The 3rd objective was achieved using secondary data sources compiled from different sources and supplemented with respective state expert's and administrators.

The results of the study are presented in a two part series with the first one "National Mental Health Survey, 2015-16 : Prevalence, pattern and outcomes " covering objectives 1 and 2 , while the second report "National Mental Health Survey, 2015-16 : Mental Health Systems" reports on the current status in the 12 states. It is important that both reports are read together to obtain a complete understanding of the entire study.

The present report has looked at a systems approach to mental health care that includes public health principles and components that aims at delivering services for large populations based on access to care, equity and rights.

- **Systems approach in mental health delivery needs strengthening**

Mental health programme though initiated nearly 3 decades back has only made marginal progress in recent times, despite increase in resource allocation. In all surveyed states, mental health programmes and activities were fragmented, disconnected and lacked focus in all aspects. Deficiencies were seen in all programme components. The programme suffers from numerous administrative, technical and resource constraints along with weak governance and leadership. A systems approach that identifies and integrates all components required for implementation of programmes through coordinated mechanisms was absent in many states.

- **Most states do not have a mental health policy**

Except the states of Gujarat and Tamil Nadu, no other state had a distinct mental health policy with clearly articulated goals, objectives and mechanisms. Many of the participants in the state expert consensus meetings in 12 states remarked that mental health activities are largely implemented based on directives from the Ministry of Health and some needs identified at the state.

- **A state level mental health action plan is missing**

Translating a policy into action requires the development of a state action plan for

implementation. An action plan clearly defines the activities for implementation, responsible agency / designated individuals, allocated budget, timelines, indicators for monitoring and expected outcomes. In all the surveyed states, mental health care related activities were mainly need based, adhoc and subject to the availability of funds. Implementing even a minimum package of services requires a well-defined action plan. In all the states of the NMHS, it was unanimously expressed that 'their (respective) state needs a clear action plan for mental health' to deliver good quality mental health services.

- **Mental health programmes are stand-alone programmes and not integrated with other health and welfare programmes**

The understanding of mental health care in recent times has undergone phenomenal changes moving from core severe mental health problems to common mental disorders including substance use disorders. Mental health problems are both a cause and consequence of several disorders, NCDs, addiction problems, injury and violence, social problems and are linked to social determinants of health. Accordingly, it is strongly recommended that mental health should be integrated with all health and welfare programmes. Despite ample opportunities to integrate mental health into ongoing national programmes pertaining to NCDs, elderly, maternal health, adolescent health, workers' health and also in several disease control programmes across the life span of individuals, integration is far from satisfactory; clarity and coordination were major stumbling blocks.

- **Resources for mental health are still limited ; need to look at alternatives**

An examination of mental health programmes at state and district levels indicate that physical, human and financial resources are still very limited. The existing resources like mental hospitals, district hospitals and medical college psychiatry departments do not have adequate resources and activities are limited. Mental health can be delivered through a wide variety of institutions from specialty hospitals to primary health centres that can be engaged in the delivery of mental health care in both the public and private sectors. However, most of them are unengaged as of now. A large number of private health care institutions and professionals exist in general and specialised care; however, their numbers, quality and activities are not known and the role they play is unclear.

- **Capacity strengthening and human resource development programmes are still limited**

Typically, in a public health model, developing human resources at the state level requires sensitisation of policy makers and programme managers from health and health-related sectors at state and district levels; short term training of doctors, health workers, ASHA's, USHA's, Anganwadi workers and others through appropriate programmes; need based training programmes in selected areas (like suicide prevention) and increasing awareness of the community through focussed media activities. Most significantly, programme managers need adequate knowledge and skills in programme implementation. This

requires identifying institutions, a variety of trainers, adequate funds for training and resources for knowledge/ training such as training manuals, guidelines, standards, etc., In the surveyed states, all these were missing.

• Health professionals and workers are not fully engaged in mental health activities

The deficiency in mental health manpower position in India is well acknowledged. A comparison of manpower across different regions is provided in Table 12. Our interactions with state level officials indicated that a wide variety of professionals and peripheral health functionaries are available for mental health care (refer to state fact sheets in annexure); however, they are not being engaged. In recent years, the focus has been on developing more specialists to deliver mental health care, while the training of supportive functionaries, midlevel workers and peripheral workers has largely been relegated to the periphery. Most participants in the state level meetings remarked 'where are the people to implement grass root level activities for mental health?'. A recent study by NIMHANS has highlighted the effective role of ASHA workers through an IRIS model that can address priority mental health problems (60). Focused pilot projects have shown results, but scaling up has indeed been a challenge (14,15,21,22).

• Private sector engagement is unclear and needs strong participation

Data from NMHS clearly indicate that most persons with mental problems often seek care from private sector agencies. In India, these range from faith healers to corporate hospitals. Being a sector that is highly unregulated, the current resources, engagement and care giving patterns are highly unclear. It is well acknowledged that 70 - 80 % of care is provided by this sector for all health problems, including mental health care. This is a largely untapped resource in mental health through organized mechanisms. The recent public-private partnerships and corporate social responsibility initiatives could be streamlined further for the care of mentally ill

Table 12: Mental health workforce in high, middle and low income countries.

Per 1,00,000		Psychiatrist	Clinical psychologist	Psychiatric social worker	Psychiatric nurse
Agarwaal SP[25] (suggested)		1	1.5	2	1*
Desai N et al[26] (suggested)		2	4	4	4
Dan Chislom[61]	LIC (suggested)	1.2	0.5	2.3	5.5
	MIC (suggested)	2	1.5	3	8
HIC[12]	(Available)	6.6	2.7	2.3	31.9
MIC[12]	(Available)	2	1.5	3	8
LIC[12]	(Available)	1.2	0.5	---	---
India[62] (Available)		0.3	0.07	0.07	0.12
* for 10 psychiatric beds					

• Mental health care is more than medicines

Comprehensive mental health care includes not only management of affected persons with drugs and/or admissions, but includes developing programmes that are based on access to care, rights and equity issues aiming at universal coverage of populations. It should also include promotion, targeted programmes, continuity in care, rehabilitation of affected individuals and families, protecting individual rights, ensuring social and economic protection and all these with availability, accessibility and affordability. It was obvious that mental health programmes at state level are yet to focus in such a comprehensive manner. A comprehensive policy adapted at a state level will be the first step to move in this direction.

• Mental health financing is adhoc and not streamlined

The financing of mental health care is in total disarray, amidst the shared responsibility by the central and state governments. None of the surveyed states had any defined allocation for mental health care activities as there were no planned activities. The budgetary support for mental health activities suffered from lack of activity specification, justification, timely allocation and difficulty in even utilising the available budget. Most health programmes faced similar challenge and mental health was worst placed in this scenario. Consequently, except the funding for the drugs, salaries and day to day essentials, there was minimal funding for other mental health care activities.

• Legislations are poorly understood and implemented

Persons with mental illnesses are highly vulnerable in every society and are subjected to a wide variety of practices that impinge on their health, impact safety and security. This is more so in Indian society due to several cultural issues and hence the mentally ill need to be supported through strong welfare measures. Review of the current status of legislative implementation across the states revealed that at times it lacked clarity or was poorly interpreted. Often the responsible agency was overwhelmed with other activities, training or sensitisation programmes were absent, the machinery to implement the legislations was found wanting, and monitoring the status of implementation at the state / district level was missing. Consequently, only those 'lucky and fortunate' derived the benefits of legislation while the vast majority continued to be ignorant of the welfare measures / mental health legislations.

• Guidelines for minimum package of interventions at different levels does not exist

Stepped care is often described as "Having the right service in the right place, at the right time delivered by the right person". Taking a systems perspective in managing mental health problems, the stepped care model identifies and delineates services that could be undertaken "in a stepped manner" from the lower most levels to the higher ones in a progressive manner. Embodying the concept of self-care and patient centred outcomes,

the stepped care model is increasingly being adopted as a preferred model of service delivery especially for mental health care. Across different levels, this concept and practice was found missing.

• Mental health promotion activities has not gained prominence

With prominence for care and management being of prime importance, mental health promotion activities on a large scale were not seen in all states. Mental health promotion through several methods focussing on strengthening resilience, coping abilities, stress reduction, family support systems, community participation and others delivered through schools, work places and in local communities are required and can address many problems at an early stage. Programmes in educational institutions and work places need considerable strengthening in the coming days to focus on promotion of health and to build support mechanisms.

• Advocacy and awareness programmes are adhoc in nature

Advocacy on issues and awareness building in a society are critical for 'moving' programmes in the right direction and these should be evidence based. The study revealed that the required strategies and resources for advocacy were often a constraint limiting the exercise to an occasional event. Current mental health education activities are isolated, sporadic and invisible in nature and lacked focus and direction. Local NGOs were predominantly involved in facilitating the issuance of certificates as well as conducting isolated education activities. Many activities related to setting up deaddiction services, day care centres, long stay homes, sheltered workshops and others were missing and lacked sustained advocacy activities.

• Coordination between agencies is lacking

Timely coordination of activities was absent and coordination between the Centre – states–districts – departments- institutions – peripheral agencies was missing, often leading to delays in implementation. This was echoed by participants in all state level workshops. This was obviously due to the lack of a designated nodal unit for mental health at the state level. Even though every state had a mental health authority and a state mental health programme officer, confusion exists on their specific roles and responsibilities. The activities focused more on the licensing of institutions, legislative issues, assuring drug availability, and less on programme development – delivery – monitoring and evaluation.

• Programme monitoring and evaluation are missing components

The most neglected area in mental health services delivery and its implementation across the states has been the monitoring of programmes, while evaluation (in its true sense) has been virtually absent or minimally present. Excepting the two states of Tamil Nadu and Gujarat, none of the other states reported any mechanisms for meaningful monitoring or evaluation. The need for measurable and defined indicators, methods of data collection, specified programme officers for monitoring, review of programme components and the required support systems for monitoring activities were totally lacking. 'Sending a report is a common practice, and sometimes an administrative requirement' remarked many participants.

7. Summary

In conclusion, the MHSA in the surveyed states revealed a fragmented and isolated approach to mental health programmes. There was lack of coordination, policy, plan of action, programme development, financing, legislation, human resources ,inter- and intra-sectoral activities, public awareness and civil society engagement. Mental health in India, in 2016, was still largely confined to diagnosis and drug delivery for programme implementation. The larger areas of mental health promotion, continued community care, rehabilitation, welfare and protection issues, integration into other health and health-related programmes, systematic monitoring and periodic evaluation were at best only minimal.

These observations call for Capacity strengthening of health sector, reorientation of health systems to address existing and emerging mental health issues, strategically delivering programmes to populations and measuring outcomes in a systematic manner. It requires strengthening of governance, fostering of leadership, enhancing of resources, building capacity of institutions and professionals across health and related disciplines, scaling up of advocacy efforts and finally a framework for implementation. With the new mental health policy and the Mental Health Care Bill, India is at an opportune and appropriate juncture to build population centred and public health oriented mental health systems in the commimg days.

Innovations lead the way.... Tamil Nadu
Markkam and Maruthuvam

In the southern Indian state of Tamil Nadu, the focus of attention has been on the Erawadi dargah and the program is facilitated by the Erwadi Dargah Committee since 2012. Initially, forty spiritual healers participated in the programme and were sensitized about basic mental health such as the signs & symptoms of Psychiatric illness, importance of early identification and treatment and the role of spiritual healers in treating mental illness. Apart from demonstration of case studies, discussions were held to clear doubts, resulting in the faith healers referring the mentally ill patients to the psychiatric clinic after the religious rituals.

The recovered suitable beneficiaries of Markkam and Maruthuvam are referred to Kadaladi community mental health programme to undergo the vocational rehabilitation training in sea shell products, sea weed cultivation and palm products which enhance their quality of life.

Buoyed with its success, the dargah committee donated one acre land and government of Tamilnadu has constructed a 50 bed Rehabilitation Institution cum Psychiatric Hospital. With this success, steps have been initiated to launch the similar kind programmes at St.Antony Church, Puliyampatti and PrasannaVenkatachalapathyTemple,Gunaseelam.

Box 5: National Mental Health Policy of India – 2014

The National Mental Health Policy, 2014, is based, inter-alia, on the values and principles of equity, justice, integrated and evidence based care, quality, participatory and holistic approach to mental health and is in consonance with the World Health Assembly resolution 65.4 on global burden of mental disorders and the need for a comprehensive, co-ordinated response from health and social sectors at the Community level. It aims to address the social determinants of mental health like poverty, environmental issues, education, etc.,

The vision of the NMHP 2014 is to promote mental health, prevent mental illness, enable recovery from mental illness, promote de-stigmatisation and desegregation, and ensure socio-economic inclusion of persons affected by mental illnesses by providing accessible, affordable and quality health and social care to all persons through their life-span, within a rights-based framework.

Goals

a. To reduce distress, disability, exclusion morbidity and premature mortality associated with mental health problems across the life-span of the person

b. To enhance the understanding of mental health in the country

c. To strengthen the leadership in the mental health sector at the national, state, and district levels.

Objectives

1. To provide universal access to mental health care.
2. To increase access to and utilisation of comprehensive mentalhealth services (including prevention services, treatment and care and support services) by persons with mental health problems.
3. To increase access to mental health services for vulnerable groups including homeless person(s), person(s) in remote areas, difficult terrains, educationally/socially/economically deprived sections.
4. To reduce the prevalence and impact of risk factors associated with mental health problems
5. To reduce risk and incidence of suicide and attempted suicide.
6. To ensure respect for rights and protection from harm of person(s) with mental health problems.
7. To reduce stigma associated with mental health problems.
8. To enhance theavailability and equitable distribution of skilled human resources for mental health.
9. To progressively enhance financial allocation and improve their utilisation for mental health promotion and care.
10. To identify and address the social, biological and psychological determinants of mental health problems and to provide appropriate interventions.

More details available at: http://www.nhp.gov.in/sites/default/files/pdf/national%20mental%20health%20policy%20of%20india%202014.pdf

Box 6: The Mental Health Care Bill, 2016

The Mental Health Care Bill, 2016 was passed by the RajyaSabha on August 9, 2016. The Bill intends to repeal the Mental Health Act, 1987.

The Statements of Objects and Reasons to the Bill, state the government ratified the United Nations Convention on the Rights of Persons with Disabilities in 2007. The Convention requires the laws of the country to align with the Convention. The new Bill was introduced as the existing Act does not adequately protect the rights of persons with mental illness nor promotes their access to mental health care. The key features of the Bill are

Rights of persons with mental illness:Every person shall have the right to access mental health care and treatment from services run or funded by the government.The right to access mental health care includes affordable, good quality of and easy access to services. Persons with mental illness also have the right to equality of treatment, protection from inhuman and degrading treatment, free legal services, access to their medical records, and complain regarding deficiencies in the provision of mental health care.

Advance Directive: A mentally-ill person shall have the right to make an advance directive that states how he wants to be treated for the illness during a mental health situation and who his nominated representative shall be.The advance directive has to be certified by a medical practitioner or registered with the Mental Health Board.If a mental health professional/ relative/care-giver does not wish to follow the directive while treating the person, he can make an application to the Mental Health Board to review/alter/cancel the advance directive.

Central and State Mental Health Authority: These administrative bodies are required to (a) register, supervise and maintain a register of all mental health establishments,(b) develop quality and service provision norms for such establishments, (c) maintain a register of mental health professionals, (d) train law enforcement officials and mental health professionals on the provisions of the Act, (e) receive complaints about deficiencies in provision of services, and (f) advise the government on matters relating to mental health.

Mental Health Establishments: Every mental health establishment has to be registered with the relevant Central or State Mental Health Authority.In order to be registered, the establishment has to fulfil various criteria prescribed in the Bill. The Bill also specifies the process and procedure to be followed for admission, treatment and the discharge of mentally ill individuals. A decision to be admitted in a mental health establishment shall, as far as possible, be made by the person with the mental illness except when he is unable to make an independent decision or conditions exist to make a supported admission unavoidable.

Mental Health Review Commission and Board: The Mental Health Review Commission will be a quasi-judicial body that will periodically review the use of and the procedure for making advance directives and advise the government on the protection of the rights of mentally ill persons. The Commission shall with the concurrence of the state governments, constitute Mental Health Review Boards in the districts of a state. The Board will have the power to (a) register, review/alter/cancel an advance directive, (b) appoint a nominated representative, (c) adjudicate complaints regarding deficiencies in care and services, (d) receive and decide applications from a person with mental illness/his nominated representative/any other interested person against the decision of the medical officer or psychiatrists in charge of a mental health establishment.

Decriminalizing suicide and prohibiting electro-convulsive therapy: A person who attempts suicide shall be presumed to be suffering from mental illness at that time and will not be punished under the Indian Penal Code. Electro-convulsive therapy is allowed only with the use of muscle relaxants and anaesthesia. The therapy is prohibited for minors.

More details available at: http://www.prsindia.org/uploads/media/Mental%20Health/Mental%20health%20care%20as%20passed%20by%20RS.pdf

Box 7: Restrategised NMHP and XII 5-year plan

- The recent recommendations of the National Human Rights Commission (NHRC) provide the much required impetus for policy and legal aspects of mental health in India. Continuing to implement the directives of the Hon'ble Supreme Court, the NHRC monitored the mental health institutions / systems across the country. Consequent to the regional meetings held during 2009 – 2011, the Supreme Court, based on the adviceof theNHRC, directed the states to file an affidavit on assessing the mental health problems at the state level and also of the resources available in the state. The Technical Committee formed to examine the responses from the states found that though there were a few innovative strategies adopted by individual state governments to further mental health and the components of mental health, several problem areas persisted and were systemic in nature. In general, the report observes that the mental health planning was ineffective and called for the development of a Mental Health Care Action Plan (Think Mental Health 2016 – 2025).
- With the inclusion of mental health along with NCD prevention and control, and opportunities for integrating mental health with other health programmes of child health, adolescent health, elderly health and others, opportunities are aplenty for improving mental health services in India.

With these developments along with the leadership and guidance of the Ministry of Health and Family Welfare, the Government of India and the participation of the respective state governments, the health sector is better placed today to improve care for the mentally ill along with the protection of human rights.

More details available at: http://mohfw.nic.in/WriteReadData/l892s/5471980538Revised%20guidelines%20NMHP.pdf

8. Recommendations

The organisation and delivery of comprehensive and integrated mental health services in India that is socio-culturally and politically diverse and economically stratified is indeed a challenging task for policy makers ; but is definitely required. In recent times, the Mental Health Policy, the new Mental Health Bill, judicial directives, National Human Rights Commission initiatives and advocacy actions aim at improving the scenario and undeniably are the right steps in this direction.

It is well acknowledged that there is no single solution that gives complete and / or quick results. Several components and activities need to be integrated into the larger existing systems, new actions need to be promoted and implementation stringently followed. Building strong health systems that integrate mental health with the larger public health system based on evidence backed practices is the need of the hour.

Data driven policies and programmes play a key role in this process. The National Mental Health Survey, 2016, conducted across 12 states with uniform and standardised methodologies and unique strategy of combining prevalence, health seeking and systems analysis attempts to provides the stimulus to develop a roadmap for mental health services.

An estimated 150 million persons are in need of mental health interventions and care (both short term and long term) and considering the far reaching impact of mental health (on all domains of life), in all populations (from children to elderly), in both genders, as well as in urban and rural populations, urgent actions are required. Considering the burden among children and adolescents (not included in this survey), thousands more are in need of care.

This huge burden of mental, behavioural and substance use disorders, in India, calls for immediate attention of political leaders, policy makers, health professionals, opinion-makers and society at large. It is hoped that the data from the NMHS will inform mental health policy and legislation and help shape mental health care delivery systems in the country. Most significantly, mental health should be given higher priority in the developmental agenda of India. All policies and programmes in health and all related sectors of welfare, education, employment and other programmes need to include and integrate mental health agenda in their respective policies, plans and programmes.

Based on the study results of this report and the accompanying report, interactions with stake holders, views of community respondents and a review of past lessons to improve mental health systems in India, the following recommendations are placed herewith.

1. The existing National Mental Health Programme, and its key implementation arm the District Mental Health programme (DMHP), needs significant strengthening. In consultation between central and state stakeholders, there is an urgent need for formulating explicit written action plans, increasing compliance towards implementation by supportive supervision, enhancing

mechanisms of integration, developing dedicated - ring fenced financing, devising mechanisms for accelerating human resources, improving drug delivery and logistics mechanisms and devising effective monitoring frameworks, so as to provide the widest possible coverage to affected citizens.

2. Broad-basing of priorities and planning of services to address the triple burden of common mental disorders, substance use disorders and severe mental disorders is required through focused as well as integrated approaches.

   - Mental health should be integrated with programmes of NCD prevention and control, child health, adolescent health, elderly health and other national disease control programmes. Specific programme implementation strategies and guidelines should be provided to all state governments in relation to activities, programmes, human resources, funding as well as monitoring.
   - In particular, in all these programmes, screening for common mental disorders (depression, suicidal behaviours, substance use problems, etc.,), health promotion (through yoga and other methods) and continuity of care / referral services should be an integral component.
   - In addition, existing platforms of educational institutions and work places should be strengthened to include mental health agenda. Such programmes should first be initiated in DMHP sites based on the experiences of pilot studies and expanded in the next phase.

3. All Indian states should be supported to develop and implement a focused "Biennial mental health action plan" (covering severe mental disorders, common mental disorders and substance use problems) that includes specified and defined activity components, financial provisions, strengthening of the required facilities, human resources and drug logistics in a time bound manner. It should include implementing legislations, coordinated Information Education Communication (IEC) activities, health promotion measures, rehabilitation and other activities. These action plans should indicate responsible agencies or units for each defined activity component, their budget requirements and time lines of implementation along with monitoring indicators. Monitoring and evaluation should be an inbuilt component of this action plan and could be revised once in five years to measure progress.

4. Capacity strengthening of all policy makers in health and related sectors (education, welfare, urban and rural development, transport, etc.,) at the national and state levels should be given priority. Furthermore, human resource development for mental health in health and all related sectors should be systematically planned and implemented over the next 5 years. Based on their roles and responsibilities, these strategies should focus on (i) sensitisation of policy makers and professionals in health, education, welfare, women and child development, law, police and others, (ii) training all existing and new state mental health programme officers in programme implementation, (ii) training all district mental health programme officers in programme implementation, (iv) building skills and knowledge of doctors (modern and traditional), health workers, ANMs, ASHAs and USHAs, Anganwadi workers and others.

   - The DMHP is the key implementation

arm of the NMHP, currently led by a psychiatrist or a medical doctor trained in mental health. Strengthening the knowledge and skills of DMHP officers in each state should move beyond diagnosis and drugs towards acquiring skills in programme implementation,monitoring and evaluation. Training in leadership qualities as required at the district level are essential.

5. Human resource development at all levels requires creating mechanisms by identifying training institutions – trainers – resources – schedules– financing at the state level.

   - In all human resource activities, creating virtual internet based learning mechanisms to successfully train and hand-hold all non-specialist health providers' needs expansion; this can achieve the task shifting to non-specialists or other disciplines of medical care.
   - Technology based applications for near-to-home-based care using smart-phone by health workers, evidence-based (electronic) clinical decision support systems for adopting minimum levels of care by doctors, creating systems for longitudinal follow-up of affected persons to ensure continued care through electronic databases and registers can greatly help in this direction. To facilitate this, convergence with other flagship schemes such as Digital India needs to be explored.
   - The existing Centers of Excellence, mental hospitals, NIMHANS, medical college psychiatry units or state training institutes should be given the responsibility of developing the requisite training calendar / programmes.

6. Minimum package of interventions in the areas of mental health promotion, care and rehabilitation that can be implemented at medical colleges, district and sub-district hospitals, and primary health care settings should be developed in consultation with state governments and concerned departments and an action plan formulated for its implementation in a phased manner.

   - Focused programmes need to be developed and / or the existing programmes strengthened in the areas of child mental health, adolescent mental health, geriatric mental health, de-addiction services, suicide and violence prevention and disaster management. This should start with state level and subsequently extended to the district level.
     - These activities should be developed initially within DMHP programme and expanded to non-DMHP programmes, scaled up as mental health extension-outreach activities within their districts with the involvement of local medical college psychiatry units and district hospitals. Inaccessible areas and underprivileged communities should be given priority.

7. Upgradation of existing facilities to treat and rehabilitate persons with mental illness will require further strengthening of existing mental hospitals as mandated by the National Human Rights Commission and provided by other previous schemes of the Health ministry. This will require the creation of an accessible stepped care system of mental health care in mental hospitals, district hospitals and medical colleges (in both public and private sector) in addition to existing public systems of care, recognizing that at present more than 85% of medical care occurs in the private non-governmental sphere.

8. Drug logistics system at state level needs strengthening in indenting, procurement at state and local levels, distribution and ensuring availability on a continuous and uninterrupted basis in all public sector health facilities. The important issue of ensuring last-mile availability of the drug logistics system needs greater attention in planning and budgeting, and should be embedded in the state mental health action plans.

9. The funding for mental health programmes needs to be streamlined with good planning, increased allocation, performance based timely disbursal, guaranteed complete utilisation and robust mechanisms for oversight and accountability. There is a need for greater apportioning in the NCD flexi pool budget and the necessary mechanisms for dedicated funding for mental health within both the central and state health budgets should be included in national and state level plans. (Ring-fenced budgeting)

   Furthermore, the economic impediments to health seeking by people needs serious attention as treatment for mental health disorders is impoverishing the families and communities. To ameliorate the problems of access among the affected due to economic disparity, mechanisms such as access to transport, direct payments, payment vouchers for economically backward sections, health insurance and other schemes need to be explored. Steps to develop actuarial data on mental disorders will help private insurance companies to provide coverage for mental disorders.

10. A National registry of service providers from different disciplines (psychiatrists, psychologists, social workers, public and private mental health facilities in the area which also includes all other resources), which is periodically updated through systematic geo mapping at the state level will encourage greater participation of public and private health care providers and promote long term mental health care. This will also benefit local communities in healthcare seeking. While, this is incorporated in the new mental health bill, it requires an agency to be designated for the purpose.

11. Rehabilitation, to remedy long-standing disabilities and multiple areas of negative impact suffered by affected individuals and their families requires critical attention.

    - Firstly, this requires establishing mechanisms for creating facilities and services at district and state levels (day care centers/ respite care, half way homes, etc.,) through organised approaches.
    - Secondly, it involves economic and social protection for the mentally ill through protected housing and social security / unemployment benefits for persons with SMDs (especially the wandering mentally ill), as well as protection from discrimination and neglect.
    - Thirdly, it requires the provision of facilities for re-skilling, protected employment for persons with mental illness, provision of loans or micro-finance schemes for the affected and their family members. Convergence with other flagship schemes of the government such as Skill India needs to be explored.
    - Legal, social and economic protection for persons with mental illness should be ensured through existing legislative provisions (eg: Mental Health Care Bill) and state specific legislations to guarantee mental health care to citizens should be

strictly implemented. The provisions under these instruments need to be widely disseminated; people should be made aware of their rights and delivery channels strengthened. Side by side, effors should be made to empower the National Human Rights Commission, Right To Information act, citizen's advocacy groups, self-help groups of mentally ill, civil society organisations to bring in greater accountability in these activities.

12. With a high prevalence of mental disorders in urban areas and with growing urbanisation, the urban health component under the National Health Mission should have a clearly defined and integrated mental health component for implementation of services (defined services in identified institutions).

    Similarly, mental health in work places and educational institutions using life skills techniques can aim at health promotion, early detection as well as awareness programmes on mental health (for common mental disorders like depression, anxiety, stress reduction, alcohol and tobacco use, etc.,) and should be promoted at all levels; development of programme implementation guidelines, mechanisms and resources are critical requirments.

13. A National Mental Health literacy (including IEC) strategy and plan of implementation should be developed to strengthen and focus on health promotion, early recognition, care-support – rights of the mentally ill and destigmatisation.

    - IEC activities should move towards creating opportunities for better care, employment, educational and income generation activities for persons with mental disorders.
    - Advocacy for mental health with the active engagement of the media is critical to develop programmes for the advancement of mental health. While negative portrayal needs to be stopped, positive portrayal on creating opportunities, rights and opportunities, recovery aspects need more coverage.
    - Integrating mental health and substance use disorder within the ambit of governmental and non-governmental schemes on social and economic development (e.g. woman and child, micro-finance etc) will broad base coverage as well as reduce stigma.
    - Civil society organisations, professional bodies and the private sector should take a lead role in these activities.

14. All mental health activities, programmes, plans and strategies should be scientifically and continuously monitored at the national, state and district levels. A mental health monitoring framework with clearly defined processes, indicators and feedback mechanisms should be developed and evaluated at periodical intervals.

    - All DMHP activities should be reviewed by the District Collector or equivalent (once a month) and state level activities should be reviewed by the Principal Secretary Health (at 6 monthly intervals).
    - A select set of indicators should be finalised and standardised for uniform data collection and monitoring to measure service delivery components through routine systems

- Sample surveys on representative populations at should be undertaken at defined intervals to independently measure status and progress.
- As evaluation is critical in measuring the outcomes and impact, mental health programmes should be evaluated by external agencies every 5 years.

15. The research base in mental health should be strengthened with a focus on the following areas
    - Prioritised mental health questions should be included in the regular ongoing national surveys like NCD risk factor survey, National Family and Health Survey, National Sample Survey Organisation (NSSO) and others.
    - Delineating the burden and impact of mental and substance use disorders in primary care settings using uniform and standardised techniques.
    - Operational research focusing on programme pitfalls and achievements, barriers and challenges, integration mechanisms and coordination challenges.
    - Expanding the present survey on adolescents in the 13 – 17 years group (implemented as a pilot study) to larger populations.
    - Understanding the treatment gap to unfurl macro and micro level issues from both demand and supply angles.
    - Identifying risk and protective factors involved in causation, recovery and outcome of different mental disorders.
    - Understanding cultural perceptions and beliefs with regard to mental health for increasing the utilisation of mental health services.
    - Use of m-health and e-health to develop services, databases, registries, distant care and promote convergence with other programmes.
    - Comprehensive understanding of the rehabilitation needs of the mentally ill at the district and state levels along with a longitudinal follow-up of affected individuals.
    - Better understanding of the economic impact of mental health disorders that include both direct and indirect costs.
    - Evaluating the different strategies for mental health promotion
    - National agencies like Indian Council for Medical Research (ICMR), Indian Council of Social Science Research (ICSSR), Department of Biotechnology (DBT), Department Of Science & Technology (DST), private sector and international agencies like World Health Organisation (WHO) and other United Nations (UN) agencies should dedicate and enhance research funds for mental and substance use disorders.

A National Empowered Commission on Mental Health, comprising of professionals from mental health, public health, social sciences, the judiciary and related backgrounds should be constituted to oversee, support, facilitate, monitor and review mental health policies – plans – programmes in a continuous manner. Such a task force that works closely with the Ministries of Health at the national and state levels can provide strategic directions for mental health care programming to ensure speedy implementation of programmes.

Innovations lead the way.... Kerala

Community participation in mental health care – towards task shifting

The Mental Health Action Trust (MHAT) is a Not-for-Profit organisation that provides free, comprehensive, community-based, volunteer-led, cost-effective mental health care to the poorest people of the localities they serve, including the wandering homeless mentally ill. It aims to provide long term management of chronic mental disorders through a system of community-owned and managed care, supervised and run by MHAT. The organisationoperates through a network of community clinics. Local partners and trained volunteers function as effective mental health care coordinators.The target groups include poor patients with chronic mental health problems, including homeless mentally ill persons, in the Northern districts of Kerala.

Regular (mostly weekly) outpatient psychiatric clinics are held in the same settings where people with physical health problems are seen, using the same existing systems.Initial and follow up assessments are done by the MHAT team comprising of psychiatrists, clinical psychologists and social workers.Each patient is looked after in the community by a trained volunteer care worker who acts as his/her care coordinator.Once the acute symptoms have subsided, patients receive psychotherapy, andif appropriate also enter locally based rehabilitation programmes.If necessary, care is provided at home including visits by the clinical team.

Innovations lead the way.... Tamil Nadu

Community based rehabilitation program under District Mental Health Programme

Rehabilitation component and community participation is a novel initiative in this programme and is aimed to overcome the challenges of institution based rehabilitation. The programme utilises the resources available in the community through the efforts of the people with disability, their families and communities. Care Givers Association comprising of family members of those with mental disability have been formed at Ramnad and Madurai districts. This Self Help Group is a group of women (mothers and care givers) belonging to the families of persons with mental disabilities. The family members meet once in a month and discuss issues relating to family problems in care giving.

With support from M S Chellamuthu Trust, Madurai, need based entrepreneurship training for the eligible caregivers are provided. Tamil Nadu Corporation for Women Development provides the subsidy based credit loan for income generation activities. The families collect monthly subscription and operate their bank accounts. Every month they meet and discuss about savings, credit activities and receive training in entrepreneurship. The families are hugely benefited by these micro economic development activities. The self-help groups in Madurai are involved in activities like laundry, bakery, departmental stores, agro-based work and animal husbandry. In Ramanathapuram, the self-help groups are involved in the sale of sea-shell products, palm products. Recently they have signed an MOU with the Central Salt and Marine Chemicals Research Institute (CSMCRI) for sea weed cultivation at Erwadi. A portion of the profit was used to sponsor the treatment camps.

The has been linked to “Right to Work” under MNREGA guaranteed 100 work days; the differently abled person work for 5 hours and gets a wage of Rs.183/-per day. A trained village facilitator would act as lay counselors for differently abled persons. A block level federation has also been formed. The mental health professional of the DMHP reviews the performance of the beneficiaries regularly.

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10. Annexures

Annexure 1: Indicators

Quantitative indicators

Sl. No	Indicator	Definition	Computation	Source(s) of data
1	Availability of general health care facilities in the state	Number of general health care facilities (Public and Private sector) in the state per 100000 population	**Numerator:** Number of health care facilities (overall and Sub- category) functional in the state **Denominator:** Total population of the state **Multiplier:** 100000	• Report of National Health Profile of India • NRHM annual reports • Rural health statistics report • Medical Council of India • Rehabilitation Council of India • Communication with state health department • District Statistical Handbook
2	Availability of health professionals/ personnel in the state	Number of health professionals/ personnel available in the state per 100000 population	**Numerator:** Total number of health professionals/personnel available in the state **Denominator:** Total population of the state **Multiplier:** 100000	• Office of National Health Mission • Report of National health profile of India • Rural health statistics report • Statistical Diary • District CMOs office • Office of Director General of Health Services • District statistical Handbook
	Note: **Total health professionals/personnel is calculated by adding total numbers in each of the following categories:** Doctors -Specialists (any type), Doctors – MBBS, AYUSH doctors, Nurses, Pharmacists, ANMs / Health worker, ASHA / USHAs			
3	DMHP coverage in the state	Percentage of districts in the state covered by DMHP	**Numerator**: Total number of districts covered under DMHP **Denominator**: Total number of districts in the state **Multiplier:** 100	As in item number 2
4	Population Coverage under DMHP in the state	Percentage of state population covered by DMHP	**Numerator**: Total population in the state covered under the DMHP Districts **Denominator:** Total population of the state **Multiplier:**100	As in item number 2
5	Tribal Population Coverage under DMHP in the state	Percentage of tribal population covered by DMHP	**Numerator:** Total tribal population in the state covered by DMHP Districts **Denominator:** Total tribal population of the state **Multiplier:**100	As in item number 2

6	Availability of Mental health care facilities in the state	Number of Mental health facilities (in each category) in the state per 100000 population	**Numerator:** Number of Mental health facilities (in each category)in the state **Denominator:** Total population of the state **Multiplier:** 100000	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental health programme officers • Personal communication with practicing psychiatrist • Personal communication with NGOs • State Health and Family Welfare department • Department of Medical Education
	The various categories mental health facilities include: Mental hospitals, Medical colleges with psychiatric department, General hospitals with psychiatric units, Mobile mental health units, Day care Centre, De-addiction units / Centres, Residential half way homes, Long stay homes, Hostel (quarter stay homes), Vocational Training centres, Sheltered workshops.			
7	Mental health services by District/General hospitals in the state	Percentage of District/General hospitals in the state providing mental health services	**Numerator:** Number of District/General hospitals in the state providing mental health services **Denominator:** Total Number of District/General hospitals in the state **Multiplier:** 100	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental health programme officers • State Health and family welfare department
8	Mental health services by Taluka hospitals in the state	Percentage of Taluka hospitals in the state providing mental health services	**Numerator:** Number of Taluka hospitals in the state providing mental health services **Denominator:** Total Number of taluka hospitals in the state **Multiplier:** 100	As in item number 7
9	Mental health services by PHCs in the state	Percentage of PHCs in the state providing mental health services	**Numerator:** Number of PHCsin the state providing mental health services **Denominator:** Total Number of PHCs in the state **Multiplier:** 100	As in item number 7

10	Availability of Beds for mental health inpatient services in the state	Number of beds available for mental health inpatient services in the state per 100 000 population	**Numerator:** Total number ofbeds available in mental health hospitals, general/ district hospitals and medical college hospitals for mental health inpatient services in the state **Denominator:** Total population of the state **Multiplier:**100000	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental health programme officers • State Health and family welfare department • Communication with Mental hospitals/Institutes • Communication with Medical Colleges
11	Mental health professionals/ personnel in the state	Number of Mental health professionals/ personnel (in each category)in the state per 100 000 population	**Numerator:** Total number of Mental health professionals/personnel (in each category) in the state **Denominator:** Total population of the state **Multiplier:**100000	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental health programme officer • Personal communication with psychiatrist and psychiatric professional bodies
	1. <u>Mental health professionals/personnel includes following categories;</u> Psychiatrists, Clinical psychologists, counsellors, Psychiatric Social workers, Nurses trained in mental health/Nurses with DPN qualification, Rehabilitation workers and Special Education teachers, Professional and paraprofessional psychosocial counsellors			
12	Health professionals/ personnel in the state trained in mental health	Percentage of health professionals/ personnel(in each category) in the state who have undergone training in mental health in the last 3 years	**Numerator:** Number of health professionals/ personnel(in each category) in the state who have undergone training in mental health in the last 3 years **Denominator:** Total Number of health professionals/personnel working in the state **Multiplier:**100	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental health programme officer
	<u>Categories under health professionals/personnel include</u> Doctors – Specialists (any type),Doctors – MBBS,AYUSH doctors, Nurses, Pharmacists, ANMs / Health worker,ASHA / USHAs			
13	Mental Health Budget	Percentage of total health budget allotted for mental health by state health department for the year 2014	**Numerator:** Total budget allotted for Mental health by the state (INR) **Denominator:** Total Health Budget of the state **Multiplier:**100	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental health programme officer

14	Utilisation of mental health budget by state health department	Percentage of total allotted mental health budget that is utilized	**Numerator:** Amount of money utilised for mental health services by the state health department (INR) **Denominator:** Total budget allotted for Mental health by state health department (INR) **Multiplier:** 100	As in item number 13
15	Suicide incidence rate in the state by age and gender	Number of suicides per 100000 population, by age and gender	**Numerator:** Number of suicides in the state (by age and gender) **Denominator:** Total population of the state (for each corresponding age group and gender) **Multiplier:** 100000	• State crime records bureau, • National Crime records bureau

Note: For each of the indicators multiple sources were identified as all the needed information was not available from one particular source. In instances it also facilitates cross verification of the information collected from one particular source.

Burden and treatment gap of mental morbidity

Sl no	Indicator	Computation for Burden	Computation for Treatment gap	Source
16	Prevalence & treatment gap of Common mental disorder	**Numerator:** Total number of People with mental illness in the state (for each category – common mental disorder/severe mental disorder/ alcohol use disorder/depressive disorder/ high suicidal risk) **Denominator:** Total number of surveyed population in the state **Multiplier:**100	**Numerator:** Total number of People with mental illness in the state (for each category) – Number of persons on treatment for mental health problems in the state (for each category) **Denominator:** Total number of People with mental illness in the state (for each category) **Multiplier:**100	National Mental Health Survey*
17	Prevalence & treatment gap of Severe mental disorder			
18	Prevalence & treatment gap of Depressive disorder			
19	Prevalence & treatment gap of Alcohol use disorder			
20	Prevalence & treatment gap of High Suicidal risk			

Note: * Data source needs to be delineated at state level for future comparisons.

Qualitative indicators

Sl No	Domain	Description	Scoring	Source
1	Mental health Policy	• Mental health policy is an organized set of values, principles and objectives for improving mental health and reducing the burden of mental disorders in a population. • Presence of an exclusive policy for mental health at the state level with formal endorsement by the state government was considered. • Comprehensiveness of the policy in addressing various mental issues was taken into account while scoring. • In keeping with the principle of inter-sectoral coordination, reference to mental health in policy related to other sectors was also explored.	On scale of 0-10.	• Secretary, State mental health authority • State nodal officer for mental Health • State Health and family welfare department • Discussions with heads/officer in-charge of other relevant departments.
➢ There is a dedicated mental health Policy (standalone policy) formulated by the state government=10 ➢ Mental health policy of the state is an adaptation of the national mental health policy or is included in Health/ Disability/other related policy/in all these areas=5 ➢ There is no written policy on mental health in the state=0 Note: If there is a dedicated mental health policy for the state or it is an adaptation of the national mental health policy, a copy of the same should be provided for scoring purpose.				
2	Mental health action plan and its implementation	• Mental health action plan is a detailed pre-formulated scheme for implementing strategic actions that favour the promotion of mental health, the prevention of mental disorders, and treatment and rehabilitation. • SMHSA looked at the Availability of formal mental health action plan in the state. It was assessed on the following aspects: Presence of strategies, time frames, resources required, targets to be achieved, indicators and activities. • Further, each of the activities implemented were assessed on a scale of 0-10 to understand the level of its implementation.	On scale of 0-10.	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental Health programme Officer

Description of terminologies used:

Vital activities**: Activity 1 and 2 in the suggested list of activities were considered minimum essential activities.
≥80%of the activities means:** Vital activities + 7 or moreessential activities are satisfactorily implemented
≥50% of the activities means:** Vital activities + 3 or moreessential activities are satisfactorily implemented
Essential activities**: Activities3 to 11 listed below are considered essential activities
Satisfactory implementation means: On a scale of 10, particular activity scores 5 and above

****Suggested List of activities**

i. *Treatment (pharmacological/ non pharmacological) for mental disorders in health care settings (PHCs / CHCs / Taluka or sub-district hospitals)*
ii. *Ensure that psychotropic drugs are available throughout the year in PHCs / CHCs / Taluka hospitals on a continuous and uninterrupted basis*
iii. *Periodic or regular monitoring of all activities*
iv. *Provide follow up care / domiciliary care in the community*
v. *Educate the public / IEC activities*
vi. *Implementation of specific legislations*
vii. *Mental health care preparedness plan during Disaster/Emergency(separately or as part of the National Disaster Management Authority)*
viii. *Training / Sensitization programme for (doctors, ANM, Health worker and other health care professionals*
ix. *Conduct programmes with other sectors/ departments like Education, Women and child, Social welfare Law and justice, welfare on selected topics*
x. *Support planning and undertaking research*
xi. *Periodical discussion with community / local leaders, Spiritual / traditional healers or with affected families in implementing mental health services*

- Mental health action plan exists for the state and >80% of the activities are satisfactorily implemented across the state=10
- There is no mental health action plan for the state however >80% of the activities are satisfactorily implemented across the state=9
- Mental health action plan exists for the state and >50% of the activities are satisfactorily implemented across the state=8
- There is no mental health action plan for the state however >50% of the activities are satisfactorily implemented across the state=7
- Only minimum essential activities are satisfactorily implemented across the state=6
- Minimum essential activities are satisfactorily implemented in DMHP districts only and DMHP districts cover >50% of the districts=5
- Minimum essential activities are satisfactorily implemented in DMHP districts only and DMHP districts cover <50% of the districts=3
- Non-core activities are satisfactorily implemented in the state WITH or WITHOUT one minimum essential activity=2
- Mental health action plan Exists at the state level, but none of the activities that are part of the action plan are implemented to a satisfactory level=1
- State doesn't have mental health action plan and there is no satisfactory implementation of any of the activities=0

Note: If mental health action plan exists for the state, a copy of the same should be provided for scoring purpose

3	State mental health Co-ordination mechanism	• State Mental Health Authority/committee is the statutory body constituted by Government in accordance with Mental Health Act 1987. • Presence of such authority and its functioning was accounted for while scoring for this particular domain. Functions include 1. State Mental Health Authority/committee should be in-charge of regulation, development and co-ordination with respect to Mental Health Services under the State Government and all matters which, under Mental Health Act are the concern of the State Government or any officer or authority subordinate to the State Government 2. It will supervise the psychiatric hospitals and psychiatric nursing homes and other Mental Health Service agencies (Including places in which mentally ill persons may be kept or detained) under the control of State Government. 3. It will advise the State Government on all matters relating to mental health and 4. It shall discharge such other function with respect to matters relating to Mental Health as the State Government may require. • As proxy of its functioning information on its most recently held meeting was obtained.	On scale of 0-10.	---do---
➢ State level Authority/ committee is Present and has met within the preceding 1 year (as on January 2016) and all the above 4 activities are satisfactorily carried out by the authority/committee=10 ➢ State level Authority/ committee is Present and has met within past 3 years (as on January 2016) with implementation of select activities from among those indicated above=7 ➢ State level Authority/committee is Present and has met more than 3 years ago (as on January 2016) with implementation of select activities from among those indicated above=5 ➢ State level Authority/committee is Present but no meeting was held=4 ➢ There is no state level authority/committee however designated nodal officer is present=3 ➢ There is neither a state level authority/committee nor a nodal officer for mental health Programme=0				
4	Budget for Mental Health	• Financing is a critical factor in the realization of a viable mental health system. • Separate budget head for mental health and description of the line items under the budget was assessed. • Release of the budget at an appropriate time and its utilization pattern was considered for scoring purpose.	On scale of 0-10.	----do-----
➢ There is dedicated budget head for mental health in the state and is used for mental health activities across all districts in the state =10 ➢ There is separate budget available at the state level, but only for select activities =7 ➢ There is No separate budget head in the state, but budget is available and released for mental health activities as and when asked for, across all districts in the state=6 ➢ Budget available only for DMHP districts and DMHP is implemented in more than 50% of the districts in the state=4 ➢ Budget available only for DMHP districts and DMHP is implemented in less than 50% of the districts in the state=2 ➢ There is no budget for mental health activities in the state=0				

5	Training programme for mental health	• Human resources are the most valuable asset of a mental health service. At primary care level the competencies required to manage mental health problems include skills for different cadre of people: Diagnosis and treatment of mental disorders, Counselling, support and psycho-education, Advocacy, Crisis intervention, Mental health promotion and prevention of disorders • Presence of a structured training programme that covers all the essential skills as listed above were assessed to score for this particular domain.	On scale of 0-10.	------do----
➢ Presence of training programme for primary care staff in all or more than 80% of the districts in the state=10 ➢ Presence of training programme for primary care staff in more than 50% of the districts in the state=5 ➢ Presence of formal training programme for primary care staff in less than 50% of the districts in the state=2 ➢ There is no training programme for primary care staff in the state=0				
6	Availability of Drugs for mental illness	• Adequate availability of essential drugs for treating neuropsychiatric conditions at all levels of health care delivery system was assessed • Drug logistics management which includes planning, indenting, transportation, storage, and ensuring its availability whenever and wherever it is required were taken in to account for scoring.	On scale of 0-10.	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental Health programme Officer • Consensus meeting
➢ **District Hospital** Always =4;Most of the times/Many times=3;Sometimes/interrupted supply =1;Not at all/Never =0 ➢ **Taluka hospital** Always =3;Most of the times/Many times=2;Sometimes/interrupted supply=1; Not at all/Never= 0 ➢ **Primary Health centre** Always =3;Most of the times/Many times=2; Sometimes/interrupted supply =1;Not at all/Never = 0				
7	IEC materials and Mental health education activities	• IEC activities are essential component of any health programmes. • Availability of adequate quantity of IEC materials in local language for majority of the mental health related issues was considered. • Conducting IEC activity regularly by catering to different audiences was also accounted while scoring.	On scale of 0-10.	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental Health programme Officer • Department of Health Education
➢ IEC materials are available in local language and or IEC activities are carried out in all or >80% of the districts in the state=10 ➢ IEC materials are available in local language and or IEC activities are carried out in >50% of the districts in the state=5 ➢ IEC materials are available in local language and or IEC activity are carried out in less than 50% 0f the districts in the state=3 ➢ IEC materials are available but not in local language and there are no IEC activity in the state=1 ➢ There are no IEC materials and no IEC activity in the state=0				

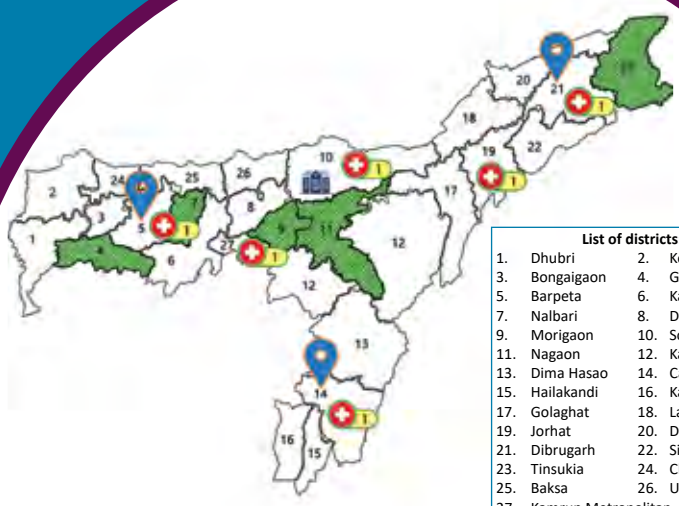
8	Intra and Intersectoral collaboration for mental health activities	• People with mental disorders have complex needs that cut across service sectors. Collaboration is needed within the health sector (intrasectoral collaboration), and outside the health sector, (intersectoral collaboration). • Collaborative activities identified for scoring includes: sensitization and training of personnel involved in other health programmes/sectors to identify and refer individuals with mental health problems to concerned person, provide counselling services to the needy, sharing data, planning and coordinating activities etc.	On scale of 0-10.	• Secretary, State mental health authority • State nodal officer for mental Health • District Mental Health programme Officer
➢ **<u>Health sector</u>** There is collaboration with all the health programmes=5 There is collaboration, with more than 50% of the health programmes=3 There is collaboration, with less than 50% of the health programme=2 There is no collaboration with the health programme=0 ➢ **Non-health sector** There is collaboration with all the non-health sector =5 There is collaboration, with more than 50% of the health sector=3 There is collaboration, with less than 50% of the health sector=2 There is no collaboration with the health sector=0				
9	Monitoring of mental health activities	• Monitoring of all activities pertaining to mental health programme and publishing it in the form of specific report were the pointers for scoring this domain. • The report should contain information on various aspects of the mental health programme, resource for mental health and burden of mental health problems in the state.	On scale of 0-10.	------do-----
➢ Specific report focusing on mental health activities in both the public and private sector has been published by the Health Department or any other responsible government unit in the last two years=10 ➢ A specific report focusing on mental health activities in the public sector only has been published by the Health Department or any other responsible government unit in the last two years=7 ➢ Mental health data (either in the public system, private system or both) have been compiled for general health statistics in the last two years, but not in a specific mental health report=3 ➢ Mental health data has NOT been compiled (either as specific mental health report nor as part of general health statistics) in the last two years=0				
10	Implementation status of legislation related to mental health	• However good a legislation/Act is, its success or failure depends on how well it is implemented. • Implementation of the law on the following lines was assessed for scoring: identifying a government department to implement the law, authorizing and training authorities to implement the law, sensitization of all concerned regarding the legislation, educating community about the legislation and by continuously monitoring process involved in implementation of law.	On scale of 0-10.	Consensus meeting
➢ Mental health act (**Not at all=0; to some extent=1; to large extent=2)** ➢ Human rights protection of those with mental illness(**Not at all=0; to some extent=1; to large extent=2)** ➢ Narcotic drugs and psychotropic substance act(**Not at all=0; to some extent=1; to large extent=2**) ➢ Rehabilitation council of India act(**Not at all=0; to some extent=1; to large extent=2**) ➢ Persons with disabilities act (**Not at all=0; to some extent=1; to large extent=2)**				

Note: Information obtained from all the above indicated sources for the various domains were further ratified during the state level consensus meeting attended by different stakeholders.

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Assam



NMHS districts and Urban Metro:	3
Districts with DMHP implemented in 12th plan period:	0
Districts with DMHP implemented prior to 12th plan:	5
Mental hospitals:	1
Medical college hospitals:	6
District hospitals:	25

List of districts:

1.	Dhubri	2.	Kokrajhar
3.	Bongaigaon	4.	Goalpara
5.	Barpeta	6.	Kamrup
7.	Nalbari	8.	Darrang
9.	Morigaon	10.	Sonitpur
11.	Nagaon	12.	Karbi Anglong
13.	Dima Hasao	14.	Cachar
15.	Hailakandi	16.	Karimganj
17.	Golaghat	18.	Lakhimpur
19.	Jorhat	20.	Dhemaji
21.	Dibrugarh	22.	Sivasagar
23.	Tinsukia	24.	Chirang
25.	Baksa	26.	Udalguri
27.	Kamrup Metropolitan		

Newly formed districts after census 2011:

28.	South Salmara Mankachar		
29.	South Kamrup	30.	West Karbi Anglong
31.	Biswanath		
32.	Charaideo	33.	East Kamrup
34.	Hojai	35.	Majuli

**Newly formed districts are not depicted in the map*

1. Demographic characteristics

1.	Population (in crores)	3.12
2.	Sex ratio (females per 1000 males)	958
3.	Male population (%)	51.08
4.	Female population (%)	48.92
5.	<18 age group population (%)	38.70
6.	60 and above age group population (%)	6.66
7.	Overall literacy rate (%)	72.19
7.1.	Male literacy rate (%)	77.85
7.2.	Female literacy rate (%)	66.27
8.	Urban population (%)	14.10
9.	Tribal population (%)	12.45

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	27
2.	Districts as on 2016# (n)	35
3.	Taluka/Sub-district * (n)	153
4.	Villages* (n)	26,395
5.	Towns with 1 lakh to <1 million population* (n)	7
6.	Million plus cities*(n)	0
7.	Per capita Income in 2013-2014 (in INR)$	44,263
8.	Poverty Headcount Ratio$$	32.50

*Source: *Census 2011, #- http://assam.gov.in; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3.General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	--	--	1. Super specialty hospitals	2	<0.01
2. Medical college hospitals	6	0.02	2. Medical college hospital(s)	0	--
3. District hospitals	25	0.08	3. Hospitals	37	0.12
4. Sub district/ Taluka hospitals	13	0.04	4. Nursing homes	254	0.81
5. Community health centers	151	0.48	5. Registered clinics		
6. Primary health centers	1026	3.29	6. Non allopathic hospitals	--	--
7. Sub centers	4621	14.81			
8. Dispensaries	255	0.82			
9. AYUSH hospitals	4	0.01			
10. AYUSH dispensaries	456	1.46			
11. ESI and CGHS hospitals	7	0.02			
Health care facilities in public sector	**6564**	**21.03**	**Health care facilities in private sector**	**293**	**0.94**
Health care facilities (public and private)				**6471**	**21.97**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resources in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	2624	8.41
2. Doctors – MBBS	6363	20.39
3. AYUSH doctors	1952	6.26
4. Registered Nurses and Midwives	18506	59.30
5. Pharmacists	2429	7.78
6. ANMs and LHV	24247	77.70
7. Health worker (Male and Female)	12611	40.41
8. ASHA / USHAs	30619	98.12
Health professionals in the state	**99351**	**318.37**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5.Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	0
2. Districts with DMHP implemented prior to 12th plan (n)	5
3. Districts covered by DMHP# (%)	14.29
4. Population covered by DMHP (%)	22.08
5. Tribal population covered by DMHP (%)	15.16

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	1	<0.01
2. Medical colleges with psychiatry department	6	0.02
3. General hospitals with psychiatry units	3	0.01
4. % of district hospitals in the state providing outpatient / in patient mental health services	12%	
5. % of taluka hospitals in the state providing outpatient / in patient mental health services	81.25%	
6. % of Primary Health Centers in the state providing outpatient mental health services	--	
7. Beds available for mental health inpatient services	534	1.71
8. Day care centers	4	0.01
9. De-addiction units/centers	6	0.01
10. Residential halfway homes	1	<0.01
11. Long stay homes	9	0.03
12. Vocational training centers	2	<0.01
13. Others (Hostel; Sheltered workshops, Mobile mental health units)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	92	0.29
2. Clinical psychologists	20	0.06
3. Nurses with DPN qualification	42	0.13
4. Psychiatric social workers	22	0.07
5. Rehabilitation workers and Special education teachers	193	0.62
6. Professional and paraprofessional psychosocial counselors	--	

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health	**Number trained**	**Percentage**
1. Doctors – MBBS	143	2.24%
2. Nurses	168	0.91%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	<0.01%
2. Percentage of mental health budget utilized	--

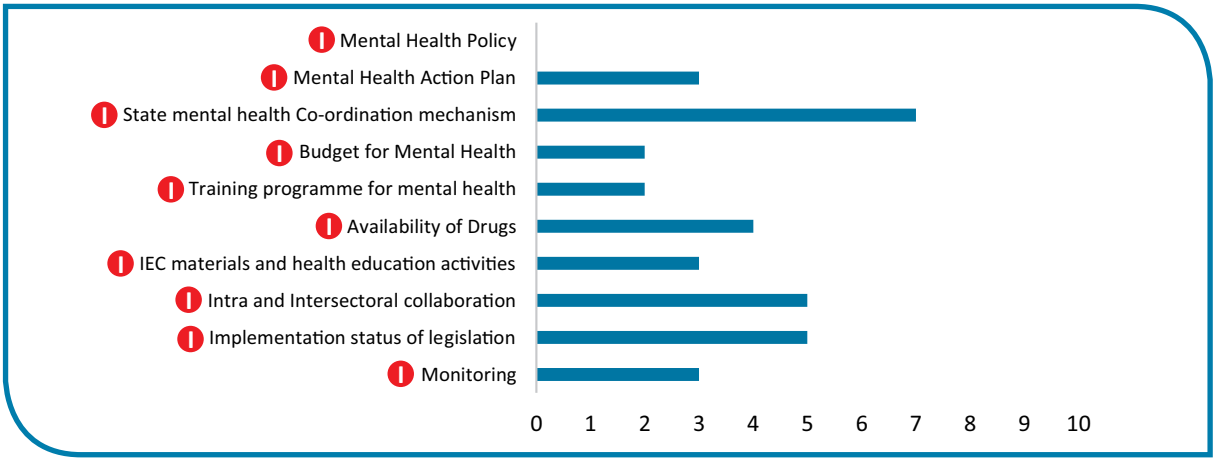
10. Suicide rate (Per 1,00,000 population)	Assam	India
1. Annual suicide Incidence rate ❙	11.1	10.6
2. Gender		
i. Male	15.75	14.30
ii. Female	6.79	7.24
3. Age		
i. <14 years	0.11	0.50
ii. 14 and above-below 18 years	15.90	9.52
iii. 18 and above-below 30 years	17.47	17.15
iv. 30 and above-below 45 years	19.12	17.22
v. 45 and above-below 60 years	17.12	15.74
vi. 60 years and above	3.32	9.40
vi. 60 years and above	18.96	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	5.3%	82.4%
Severe mental disorders ❙	0.6%	87.5%
Alcohol use disorder ❙	3.0%	88.0%
Depressive disorder ❙	1.4%	94.4%
High suicidal risk ❙	0.7%	-

Source: National Mental health Survey.

12. Mental health score card



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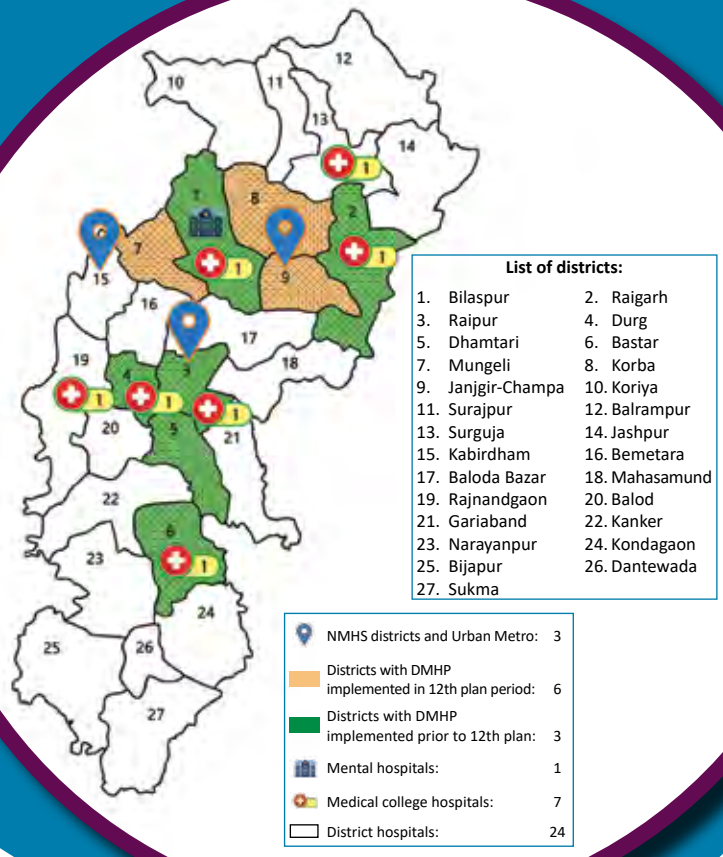
Disclaimer: The data for the fact sheet has been collated from multiple secondary sources and discussed during the State level consensus meeting; based on this, the best possible information has been provided. More details of data collection methods are provided in the report and available on request.

❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Chhattisgarh



1. Demographic characteristics

1.	Population (in crores)	2.55
2.	Sex ratio (females per 1000 males)	991
3.	Male population (%)	50.24
4.	Female population (%)	49.76
5.	<18 age group population (%)	38.16
6.	60 and above age group population (%)	7.84
7.	Overall literacy rate (%)	70.28
7.1.	Male literacy rate (%)	80.27
7.2.	Female literacy rate (%)	60.24
8.	Urban population (%)	23.24
9.	Tribal population (%)	30.62

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	18
2.	Districts as on 2016# (n)	27
3.	Taluka/Sub-district * (n)	149
4.	Villages* (n)	20,126
5.	Towns with 1 lakh to <1 million population* (n)	7
6.	Million plus cities*(n)	2
7.	Per capita income in 2013-2014 (in INR)$	58,547
8.	Poverty Headcount Ratio$$	40.19

*Source: *Census 2011, # - http://explore-chhattisgarh.blogspot.in/2011/08/; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3.General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	--	--	1. Super specialty hospitals	2	<0.01
2. Medical college hospitals	7	0.03	2. Medical college hospital(s)	1	<0.01
3. District hospitals	24	0.09	3. Hospitals	4474	17.51
4. Sub district/ Taluka hospitals	17	0.07	4. Nursing homes	--	--
5. Community health centers	157	0.61	5. Registered clinics	--	--
6. Primary health centers	790	3.09	6. Non allopathic hospitals	--	--
7. Sub centers	5186	20.30			
8. Dispensaries	--	--			
9. AYUSH hospitals	14	0.05			
10. AYUSH dispensaries	1202	4.71			
11. ESI and CGHS hospitals	--	--			
Health care facilities in public sector	**7390**	**28.93**	**Health care facilities in private sector**	**4477**	**17.52**
Health care facilities (public and private)				**11867**	**46.45**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4.Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	240	0.94
2. Doctors – MBBS	1278	5.00
3. AYUSH doctors	4482	17.54
4. Registered Nurses and Midwives	7851	30.73
5. Pharmacists	9713	38.02
6. ANMs / LHV	9370	36.68
7. Health worker (Female and Male)	9013	35.28
8. ASHA / USHAs	66000	258.37
Health professionals in the state	**107947**	**422.57**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.

Source: Select Information - India National Health Profile 2015.

5.Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	6
2. Districts with DMHP implemented prior to 12th plan (n)	3
3. Districts covered by DMHP# (%)	33.33
4. Population covered by DMHP (%)	67.74
5. Tribal population covered by DMHP (%)	47.27

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health care facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	2	<0.01
2. Medical colleges with psychiatry department	6	0.02
3. General hospitals with psychiatry units	16	0.06
4. % of district hospitals in the state providing outpatient/ in patient mental health services	66.67%	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	--	
6. % of Primary Health Centers in the state providing outpatient/ in patient mental health services	--	
7. Beds available for mental health inpatient services	112	0.44
8. De-addiction units / Centers	49	0.19
9. Vocational training centers	26	0.10
10. Sheltered work shops	3	0.01
11. Others (Residential half way homes, Long stay homes, Hostel, Mobile mental health units, Day care Centers)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	37	0.14
2. Clinical psychologists	17	0.07
3. Nurses with DPN in qualification	5	0.02
4. Psychiatric social workers	22	0.09
5. Professional and paraprofessional psychosocial counselors	127	0.50
6. Rehabilitation workers and Special education teachers	235	0.91

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	21	1.64%
2. Nurses	7	0.09%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	--
2. Percentage of mental health budget utilized	--

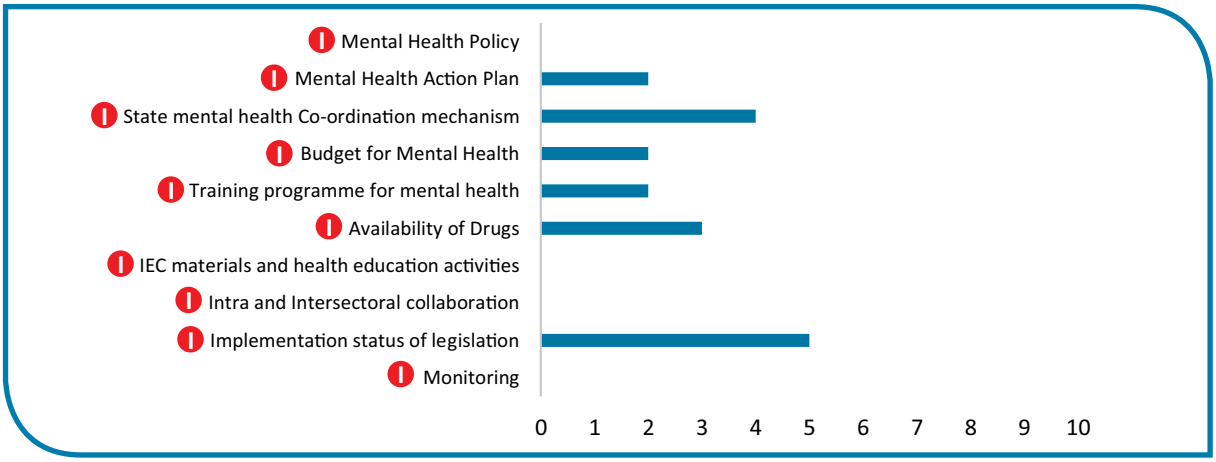
10. Suicide rate (Per 1,00,000 population)	Chhattisgarh	India
1. Annual suicide Incidence rate ❙	22.4	10.6
2. Gender		
i. Male	29.32	14.30
ii. Female	15.10	7.24
3. Age		
i. <14 years	1.28	0.50
ii. 14 and above-below 18 years	20.37	9.52
iii. 18 and above-below 30 years	37.94	17.15
iv. 30 and above-below 45 years	32.91	17.22
v. 45 and above-below 60 years	32.44	15.74
vi. 60 years and above	18.06	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	11.2%	80.1%
Severe mental disorders ❙	0.8%	54.5%
Alcohol use disorder ❙	7.1%	78.0%
Depressive disorder ❙	1.6%	61.9%
High suicidal risk ❙	0.3%	-

Source: National Mental Health Survey

12. Mental health score card



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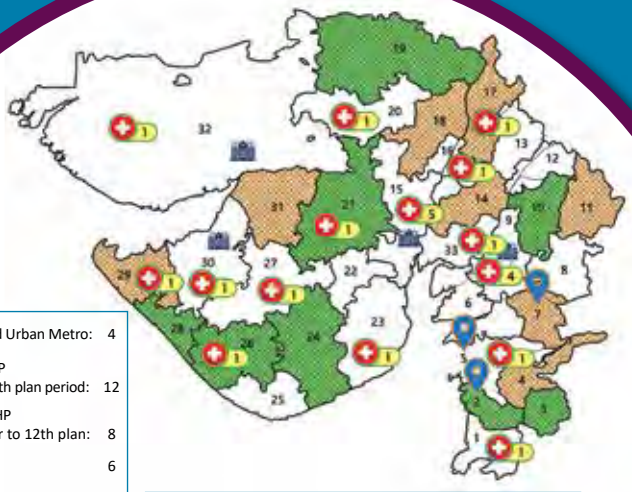
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Gujarat



NMHS districts and Urban Metro:	4
Districts with DMHP implemented in 12th plan period:	12
Districts with DMHP implemented prior to 12th plan:	8
Mental hospitals:	6
Medical college hospitals:	22
District hospitals:	28

List of districts:

1. Valsad	2. Navsari	3. Dang
4. Tapi	5. Surat	6. Bharuch
7. Narmada	8. Chhota Udaipur	9. Vadodara
10.Panchmahal	11.Dahod	12.Mahisagar
13.Aravalli	14.Kheda	15.Ahmedabad
16.Gandhinagar	17.Sabarkantha	18.Mehsana
19.Banaskantha	20.Patan	21.Surendranagar
22.Botad	23.Bhavnagar	24.Amreli
25.Gir Somnath	26.Junagadh	27.Rajkot
28.Porbandar	29.Devbhoomi Dwarka	30.Jamnagar
31.Morbi	32.Kutch	33.Anand

1. Demographic characteristics

1.	Population (in crores)	6.04
2.	Sex ratio (females per 1000 males)	919
3.	Male population (%)	52.10
4.	Female population (%)	47.90
5.	<18 age group population (%)	34.61
6.	60 and above age group population (%)	7.92
7.	Overall literacy rate (%)	78.03
7.1.	Male literacy rate (%)	85.75
7.2.	Female literacy rate (%)	69.68
8.	Urban population (%)	42.60
9.	Tribal population (%)	14.75

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	26
2.	Districts as on 2016# (n)	33
3.	Taluka/Sub-district * (n)	225
4.	Villages* (n)	18,225
5.	Towns with 1 lakh to <1 million population* (n)	26
6.	Million plus cities*(n)	4
7.	Per capita income in 2013-2014 (in INR)$	1,06,831
8.	Poverty Headcount Ratio$$	16.95

*Source: *Census 2011, # - http://www.gujaratindia.com; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	4	<0.01	1. Super specialty hospitals	15	0.02
2. Medical college hospitals	16	0.03	2. Medical college hospital(s)	6	0.01
3. District hospitals	28	0.05	3. Hospitals	1361	2.25
4. Sub district/ Taluka hospitals	32	0.05	4. Nursing homes	523	0.86
5. Community health centers	334	0.55	5. Registered clinics	62	0.10
6. Primary health centers	1208	1.99	6. Non allopathic hospitals	--	--
7. Sub centers	7274	12.04			
8. Dispensaries	458	0.76			
9. AYUSH hospitals	62	0.10			
10. AYUSH dispensaries	813	1.35			
11. ESI and CGHS hospitals	23	0.03			
Health care facilities in public sector	**10252**	**16.96**	**Health care facilities in private sector**	**1967**	**3.25**
Health care facilities (public and private)				**12219**	**20.21**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4.Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	674	1.12
2. Doctors – MBBS	3600	5.96
3. AYUSH doctors	42543	70.38
4. Registered Nurses and Midwives	99125	164.00
5. Pharmacists	32030	52.99
6. ANMs / LHV	40694	67.33
7. Health worker (Male and Female)	12176	21.03
8. ASHA / USHAs	24774	40.99
Health professionals in the state	**256156**	**423.82**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5.Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	12
2. Districts with DMHP implemented prior to 12th plan (n)	8
3. Districts covered by DMHP# (%)	60.61
4. Population covered by DMHP (%)	48.68
5. Tribal population covered by DMHP (%)	59.59

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6. Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	6	0.01
2. Medical colleges with psychiatry department	14	0.02
3. General hospitals with psychiatry units	20	0.03
4. % of district hospitals in the state providing outpatient/ in patient mental health services	57.14%	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	18%	
6. % of Primary Health Centers in the state providing outpatient mental health services	3.97%	
7. Beds available for mental health inpatient services	1034	1.71
8. Mobile mental health units	4	<0.01
9. Day care centers	9	0.01
10. De-addiction units/centers	17	0.02
11. Residential half way homes	7	0.01
12. Long stay homes	1	<0.01
13. Vocational training centers	9	0.01
14. Sheltered work shops	5	<0.01
15. Hostels	1	<0.01

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	318	0.53
2. Clinical psychologists	14	0.02
3. Nurses with DPN in qualification	39	0.06
4. Psychiatric Social workers	58	0.10
5. Rehabilitation workers and Special education teachers	685	1.13
6. Professional and paraprofessional psychosocial counselors	499	0.83

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	242	6.72%
2. Nurses	936	0.94%
3. AYUSH doctors	231	0.54%
4. Pharmacists	22	0.07%
5. ANMs / Health worker	788	1.47%
6. ASHA / USHAs	785	3.17%

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	0.82%
2. Percentage of mental health budget utilized	97%

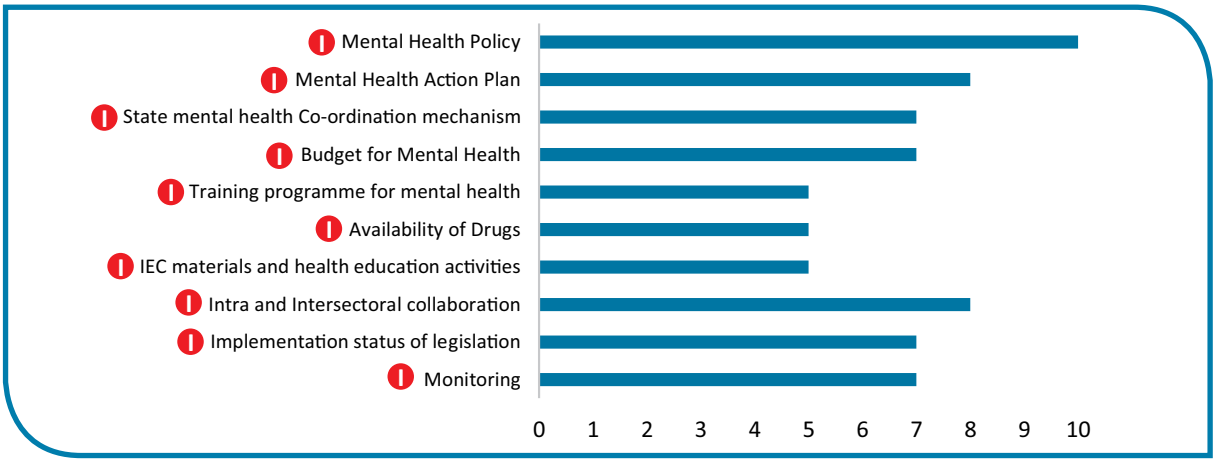
10. Suicide rate (Per 1,00,000 population)	Gujarat	India
1. Annual suicide Incidence rate ❙	11.7	10.6
2. Gender		
i. Male	14.62	14.30
ii. Female	9.06	7.24
3. Age		
i. <14 years	0.33	0.50
ii. 14 and above-below 18 years	9.60	9.52
iii. 18 and above-below 30 years	19.75	17.15
iv. 30 and above-below 45 years	19.05	17.22
v. 45 and above-below 60 years	14.46	15.74
vi. 60 years and above	8.98	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	7.1%	77.6%
Severe mental disorders ❙	0.4%	44.4%
Alcohol use disorder ❙	4.5%	67.6%
Depressive disorder ❙	1.3%	66.7%
High suicidal risk ❙	0.4%	-

Source: National Mental health Survey.

12. Mental health score card



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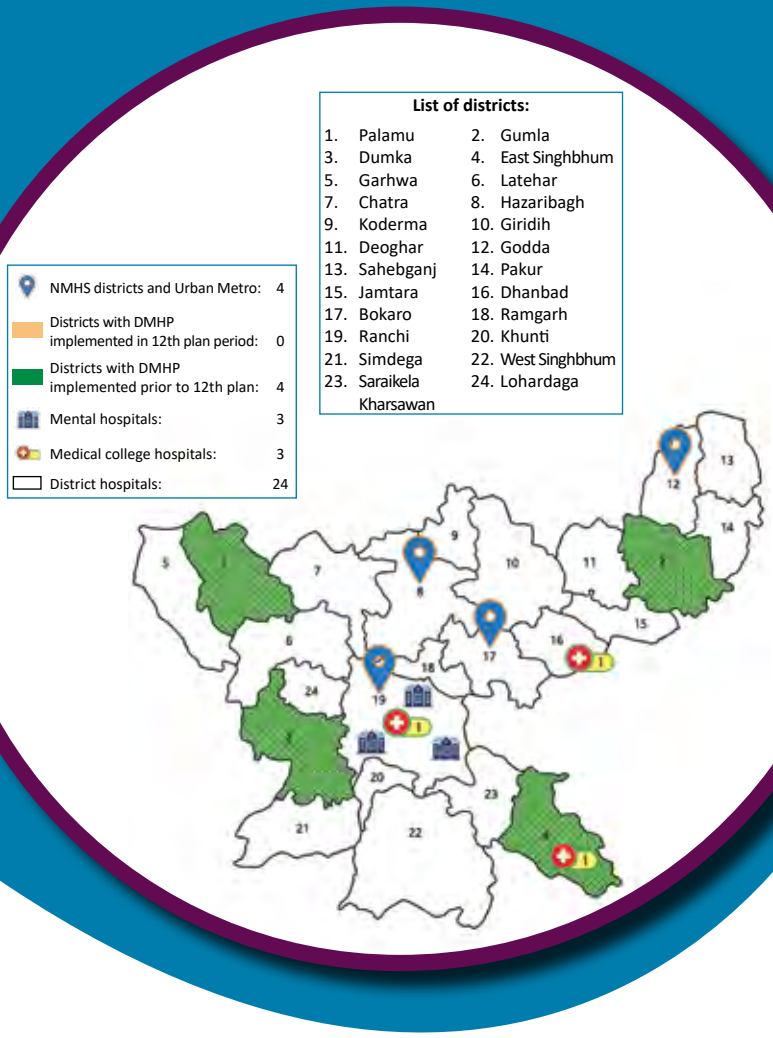
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Jharkhand



1. Demographic characteristics

1.	Population (in crores)	3.29
2.	Sex ratio (females per 1000 males)	948
3.	Male population (%)	51.32
4.	Female population (%)	48.68
5.	<18 age group population (%)	41.94
6.	60 and above age group population (%)	7.14
7.	Overall literacy rate (%)	66.41
7.1.	Male literacy rate (%)	76.84
7.2.	Female literacy rate (%)	55.42
8.	Urban population (%)	24.05
9.	Tribal population (%)	26.21

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	24
2.	Districts as on 2016 (n)	24
3.	Taluka/Sub-district * (n)	260
4.	Villages* (n)	32,394
5.	Towns with 1 lakh to <1 million population* (n)	8
6.	Million plus cities*(n)	3
7.	Per capita income in 2013-2014 (in INR)$	46,131
8.	Poverty Headcount Ratio$$	37.48

*Source: *Census 2011; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	7	0.02	1. Super specialty hospitals	5	0.02
2. Medical college hospitals	3	<0.01	2. Medical college hospital(s)	0	--
3. District hospitals	24	0.07	3. Hospitals	50	0.15
4. Sub district/ Taluka hospitals	12	0.04	4. Nursing homes	--	--
5. Community health centers	188	0.57	5. Registered clinics	--	--
6. Primary health centers	330	1	6. Non allopathic hospitals	--	--
7. Sub centers	3958	11.99			
8. Dispensaries	--	--			
9. AYUSH hospitals	5	0.01			
10. AYUSH dispensaries	341	1.03			
11. ESI and CGHS hospitals	13	0.04			
Health care facilities in public sector	**4881**	**14.80**	**Health care facilities in private sector**	**55**	**0.16**
Health care facilities (public and private)				**4936**	**14.96**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*.	71	0.22
2. Doctors – MBBS	1793	5.44
3. AYUSH doctors	6339	19.21
4. Registered Nurses and Midwives	2355	7.13
5. Pharmacists	364	1.10
6. ANMs / LHV	4213	12.77
7. Health worker (Male and Female)	7647	23.18
8. ASHA / USHAs	41173	124.81
Health professionals in the state	**63955**	**193.87**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	0
2. Districts with DMHP implemented prior to 12th plan (n)	4
3. Districts covered by DMHP# (%)	16.67
4. Population covered by DMHP (%)	19.94
5. Tribal population covered by DMHP (%)	24.44

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	3	<0.01
2. Medical colleges with psychiatry department	1	<0.01
3. General hospitals with psychiatry units.	2	<0.01
4. % of district hospitals in the state providing outpatient/ in patient mental health services	8.33%	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	33.33%	
6. % of Primary Health Centers in the state providing outpatient mental health services	--	
7. Beds available for mental health inpatient services	1288	3.90
8. Mobile mental health units	--	--
9. Day care Centers	4	0.01
10. De-addiction units / Centers	2	<0.01
11. Residential half way homes	1	<0.01
12. Long stay homes	2	<0.01
13. Vocational Training centers	2	<0.01
14. Sheltered workshops	2	<0.01

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	103	0.31
2. Clinical psychologists	19	0.06
3. Psychiatric social workers	8	0.02
4. Rehabilitation workers and Special education teachers	18	0.05
5. Professional and paraprofessional psychosocial counselors	39	0.12
6. Nurses with DPN in qualification	63	0.19

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	--	--
2. Nurses	--	--
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	0.13%
2. Percentage of mental health budget utilized	--

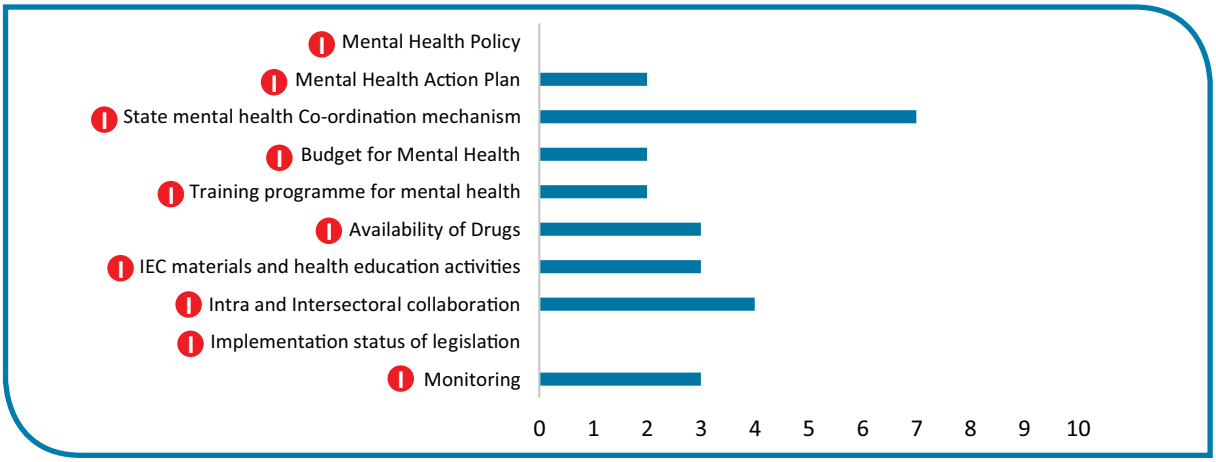
10. Suicide rate (Per 1,00,000 population)	Jharkhand	India
1. Annual suicide Incidence rate ❙	4	10.6
2. Gender		
i. Male	5.26	14.30
ii. Female	2.55	7.24
3. Age		
i. <14 years	0.40	0.50
ii. 14 and above-below 18 years	6.69	9.52
iii. 18 and above-below 30 years	7.15	17.15
iv. 30 and above-below 45 years	5.95	17.22
v. 45 and above-below 60 years	4.99	15.74
vi. 60 years and above	1.57	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	10.8%	76.1%
Severe mental disorders ❙	0.8%	33.3%
Alcohol use disorder ❙	2.4%	80.0%
Depressive disorder ❙	4.7%	67.4%
High suicidal risk ❙	0.8%	-

Source: National Mental health Survey.

12. Mental health score card



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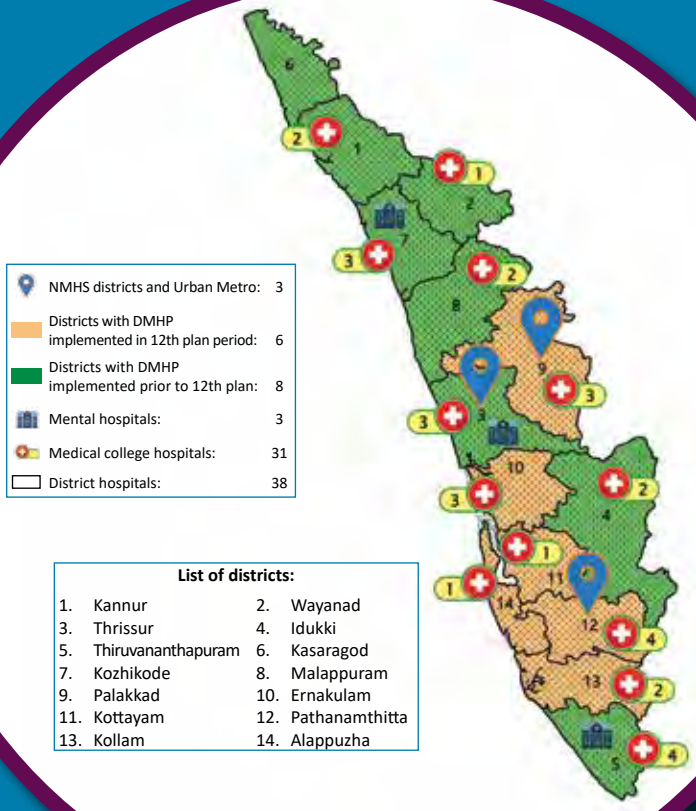
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Kerala



List of districts:

1.	Kannur	2.	Wayanad
3.	Thrissur	4.	Idukki
5.	Thiruvananthapuram	6.	Kasaragod
7.	Kozhikode	8.	Malappuram
9.	Palakkad	10.	Ernakulam
11.	Kottayam	12.	Pathanamthitta
13.	Kollam	14.	Alappuzha

1. Demographic characteristics

1.	Population (in crores)	3.34
2.	Sex ratio (females per 1000 males)	1084
3.	Male population (%)	47.98
4.	Female population (%)	52.02
5.	<18 age group population (%)	28.15
6.	60 and above age group population (%)	12.55
7.	Overall literacy rate (%)	94.00
7.1.	Male literacy rate (%)	96.11
7.2.	Female literacy rate (%)	92.07
8.	Urban population (%)	47.70
9.	Tribal population (%)	1.45

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	14
2.	Districts as on 2016 (n)	14
3.	Taluka/Sub-district * (n)	63
4.	Villages* (n)	1,018
5.	Towns with 1 lakh to <1 million population* (n)	11
6.	Million plus cities*(n)	7
7.	Per capita Income in 2013-2014 (in INR)$	1,03,820
8.	Poverty Headcount Ratio$$	8.08

*Source: *Census 2011; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	8	0.02	1. Super specialty hospitals	24	0.07
2. Medical college hospitals	9	0.03	2. Medical College hospital(s)	22	0.06
3. District hospitals	38	0.11	3. Hospitals	1150	3.44
4. Sub district/ Taluka hospitals	79	0.24	4. Nursing homes	--	--
5. Community health centers	230	0.69	5. Registered clinics	--	--
6. Primary health centers	852	2.55	6. Non allopathic hospitals	--	--
7. Sub centers	5403	16.17			
8. Dispensaries	1583	4.74			
9. AYUSH hospitals	161	0.48			
10. AYUSH dispensaries	1581	4.73			
11. ESI and CGHS hospitals	18	0.05			
Health care facilities in public sector	**9962**	**29.82**	**Health care facilities in private sector**	**1196**	**3.58**
Health care facilities (Public and Private)				**11158**	**33.40**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	2775	8.30
2. Doctors – MBBS	5858	17.54
3. AYUSH doctors	33638	100.69
4. Registered Nurses and Midwives	215708	645.71
5. Pharmacists	21411	64.09
6. ANMs / LHV	10087	30.19
7. Health worker (Male and Female)	11351	33.97
8. ASHA / USHAs	31549	94.44
Health professionals in the state	**332377**	**994.96**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	6
2. Districts with DMHP implemented prior to 12th plan (n) (2012-2017)	8
3. Districts covered by DMHP (%)	100
4. Population covered by DMHP (%)	100
5. Tribal population covered by DMHP (%)	100

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	3	<0.01
2. Medical colleges with psychiatric department	7	0.02
3. General hospitals with psychiatric units	18	0.05
4. % of district hospitals in the state providing outpatient/ in patient mental health services	47.37 %	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	16.46%	
6. % of Primary Health Centers in the state providing outpatient mental health services	--	
7. Beds available for mental health inpatient services	1962	5.87
8. Mobile mental health units	22	0.06
9. Day care centers	43	0.12
10. De-addiction units / Centers	66	0.19
11. Vocational Training centers	10	0.03
12. Sheltered workshops	6	0.01
13. Long stay homes.	146	0.43
14. Others (Residential half way homes, Hostel)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability Per 1,00,000 population**
1. Psychiatrists	400	1.20
2. Clinical psychologists	211	0.63
3. Psychiatric Social workers	15	0.04
4. Rehabilitation workers and Special education teachers	3429	10.26
5. Professional and paraprofessional psychosocial counselors	931	2.79
6. Nurses with DPN qualification	--	

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	917	15.65%
2. Nurses	818	0.38%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, and ASHA / USHAs, ANMs / Health worker	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	1.16%
2. Percentage of mental health budget utilized	0.18%

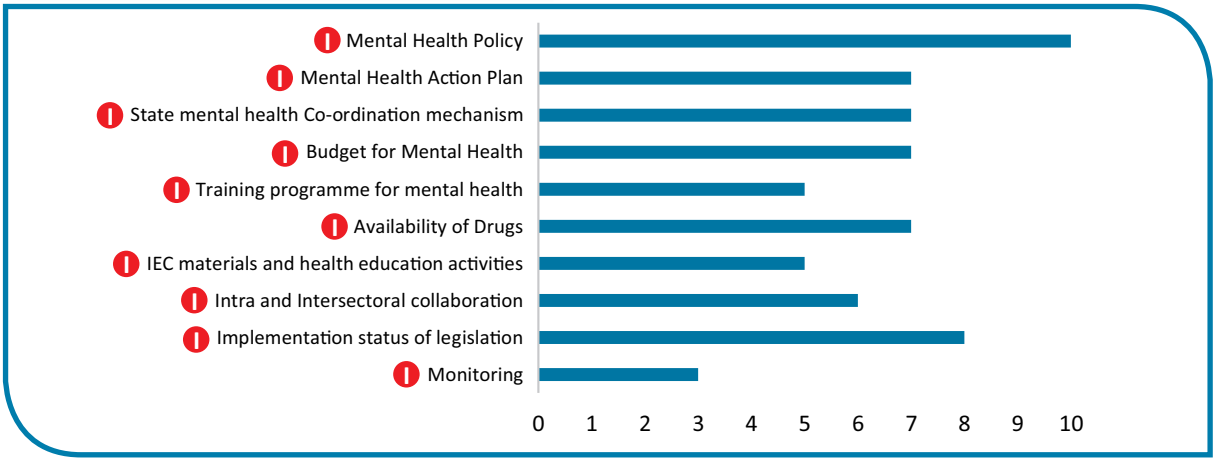
10. Suicide rate (Per 1,00,000 population)	Kerala	India
1. Annual suicide Incidence rate ❙	23.9	10.6
2. Gender		
i. Male	40.01	14.30
ii. Female	11.70	7.24
3. Age		
i. <14 years	0.73	0.50
ii. 14 and above-below 18 years	13.02	9.52
iii. 18 and above-below 30 years	23.75	17.15
iv. 30 and above-below 45 years	32.55	17.22
v. 45 and above-below 60 years	40.31	15.74
vi. 60 years and above	42.16	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	11.0%	86.0%
Severe mental disorders ❙	0.4%	62.5%
Alcohol use disorder ❙	4.8%	88.1%
Depressive disorder ❙	2.5%	86.7%
High suicidal risk ❙	2.2%	-

Source: National Mental Health Survey

12. Mental health score card



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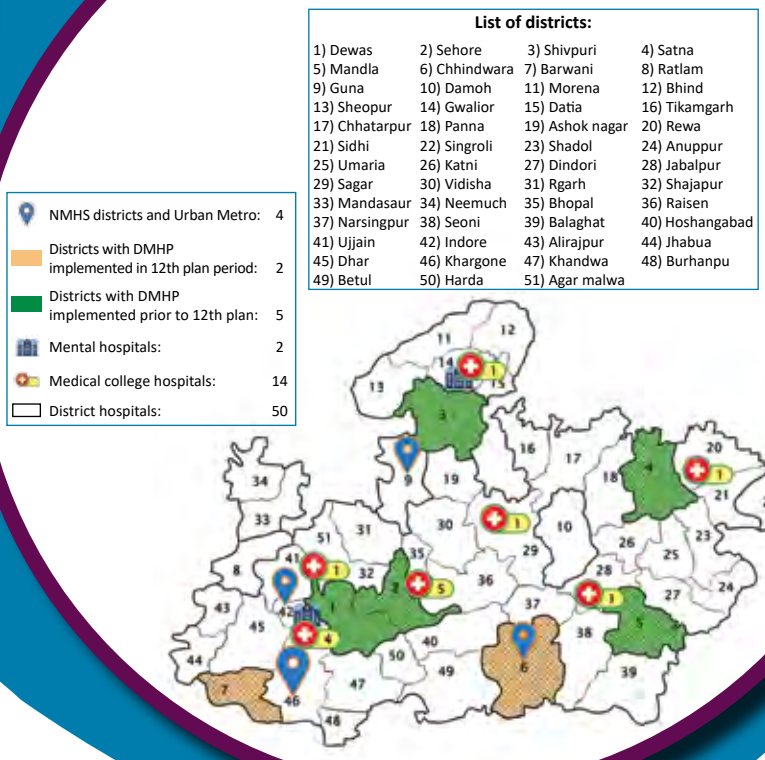
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Madhya Pradesh



1. Demographic characteristics

1.	Population (in crores)	7.26
2.	Sex ratio (females per 1000 males)	931
3.	Male population (%)	51.79
4.	Female population (%)	48.21
5.	<18 age group population (%)	39.60
6.	60 and above age group population (%)	7.87
7.	Overall literacy rate (%)	69.32
7.1.	Male literacy rate (%)	78.73
7.2.	Female literacy rate (%)	59.24
8.	Urban population (%)	27.63
9.	Tribal population (%)	21.09

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	50
2.	Districts as on 2016# (n)	51
3.	Taluka/Sub-district * (n)	342
4.	Villages* (n)	54,903
5.	Towns with 1 lakh to <1 million population* (n)	29
6.	Million plus cities*(n)	4
7.	Per capita Income in 2013-2014 (in INR)$	51,798
8.	Poverty Headcount Ratio$$	37.09

*Source: *Census 2011, # - http://www.mpdistricts.nic.in/; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	1	<0.01	1. Super specialty hospitals	2	<0.01
2. Medical college hospitals	6	<0.01	2. Medical college Hospital(s)	8	0.01
3. District hospitals	50	0.06	3. Hospitals	156	0.21
4. Sub district/ Taluka hospitals	66	0.09	4. Nursing homes	235	0.32
5. Community health centers	334	0.46	5. Registered clinics	1222	1.68
6. Primary health centers	1171	1.61	6. Non allopathic hospitals	206	0.28
7. Sub centers	9192	12.65			
8. Dispensaries	2142	2.94			
9. AYUSH hospitals	38	0.05			
10. AYUSH dispensaries	2344	3.22			
11. ESI and CGHS hospitals	13	0.01			
Health care facilities in public sector	**15357**	**21.14**	**Health care facilities in private sector**	**1829**	**2.52**
Health care facilities (public and private)				**17186**	**23.66**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	1685	2.32
2. Doctors – MBBS	4929	6.78
3. AYUSH doctors	62485	86.03
4. Registered Nurses and Midwives	108855	149.88
5. Pharmacists	1381	1.90
6. ANMs / LHV	16707	23.00
7. Health worker (Male and Female)	17882	24.62
8. ASHA / USHAs	64105	88.27
Health professionals in the state	**278029**	**382.82**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	2
2. Districts with DMHP implemented prior to 12th plan (n)	5
3. Districts covered by DMHP# (%)	13.73
4. Population covered by DMHP (%)	14.19
5. Tribal population covered by DMHP (%)	19.04

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	2	<0.01
2. Medical colleges with psychiatry department	14	0.01
3. General hospitals with psychiatry units	6	<0.01
4. % of district hospitals in the state providing outpatient/ in patient mental health services	12%	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	3.03%	
6. % of Primary Health Centers in the state providing outpatient mental health services	0.09%	
7. Beds available for mental health inpatient services	855	1.18
8. Day care centers	2	<0.01
9. Vocational training centers	2	<0.01
10. De-addiction units / Centers	7	0.01
11. Others (Residential half way homes, Long stay homes, Hostel, , Sheltered workshops, Mobile mental health units)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	37	0.05
2. Clinical psychologists	11	0.02
3. Psychiatric Social workers	7	<0.01
4. General nurses working in mental health	66	0.09
5. Nurses with DPN qualification, Rehabilitation workers and Special education teachers, Professional and paraprofessional psychosocial counselors	--	--

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	39	0.79%
2. Nurses	33	0.03%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	0.22%
2. Percentage of mental health budget utilized	10.30%

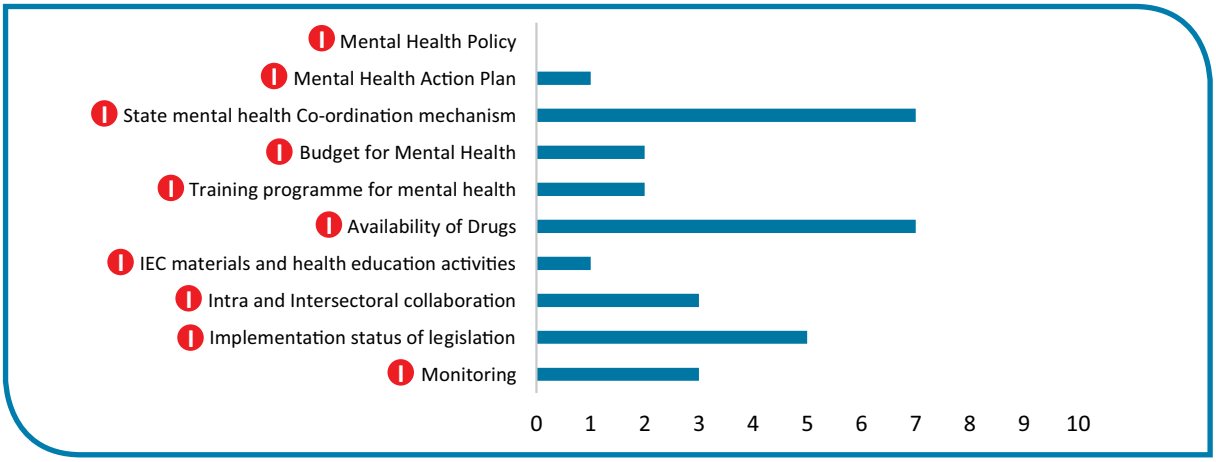
10. Suicide rate (Per 1,00,000 population)	Madhya Pradesh	India
1. Overall suicide rate ❙	11.9	10.6
2. Suicide rate for male and female		
i. Male	14.20	14.30
ii. Female	10.56	7.24
3. Suicide rate for different age groups		
i. <14 years	0.64	0.50
ii. 14 and above-below 18 years	14.97	9.52
iii. 18 and above-below 30 years	24.55	17.15
iv. 30 and above-below 45 years	17.97	17.22
v. 45 and above-below 60 years	14.27	15.74
vi. 60 years and above	7.58	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	13.5%	91.4%
Severe mental disorders ❙	0.4%	57.1%
Alcohol use disorder ❙	10.3%	94.3%
Depressive disorder ❙	1.4%	80.0%
High suicidal risk ❙	0.8%	-

Source: National Mental health Survey.

12. Mental health score card



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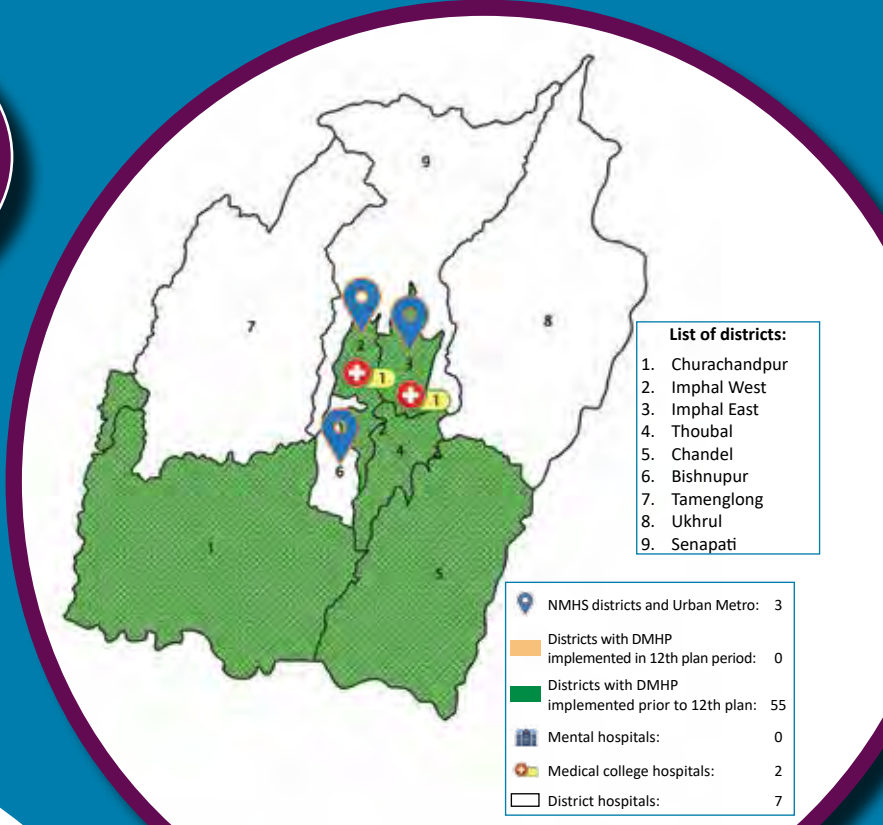
Disclaimer: The data for the fact sheet has been collated from multiple secondary sources and discussed during the State level consensus meeting; based on this, the best possible information has been provided. More details of data collection methods are provided in the report and available on request.

❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Manipur



1. Demographic characteristics

1. Population (in crores)	0.28
2. Sex ratio (females per 1000 males)	985
3. Male population (%)	50.37
4. Female population (%)	49.63
5. <18 age group population (%)	36.19
6. 60 and above age group population (%)	7.00
7. Overall literacy rate (%)	76.94
7.1. Male literacy rate (%)	83.58
7.2. Female literacy rate (%)	70.26
8. Urban population (%)	29.21
9. Tribal population (%)	40.88

Source: Census 2011.

2. Administrative and economic characteristics

1. Districts*(n)	9
2. Districts as on 2016(n)	9
3. Taluka/Sub-district * (n)	38
4. Villages* (n)	2,582
5. Towns with 1 lakh to <1 million population* (n)	1
6. Million plus cities*(n)	0
7. Per capita income in 2013-2014 (in INR)$	41,573
8. Poverty headcount ratio$$	31.98

*Source: *Census 2011; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	2	0.07	1. Super specialty hospitals	3	0.10
2. Medical college hospitals	2	0.07	2. Medical college hospital(s)	0	--
3. District hospitals	7	0.24	3. Hospitals	30	1.05
4. Sub district/ Taluka hospitals	2	0.07	4. Nursing homes	1	0.03
5. Community health centers	17	0.59	5. Registered clinics	29	1.01
6. Primary health centers	85	2.97	6. Non allopathic hospitals	--	--
7. Sub centers	421	14.74			
8. Dispensaries	20	0.70			
9. AYUSH hospitals	1	0.03			
10. AYUSH dispensaries	282	9.87			
11. ESI and CGHS hospitals	--	--			
Health care facilities in public sector	**839**	**29.37**	**Health care facilities in private sector**	**63**	**2.20**
Health care facilities (public and private)				**902**	**31.58**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	648	22.69
2. Doctors – MBBS	814	28.50
3. AYUSH doctors	743	26.01
4. Registered Nurses and Midwives	5503	192.69
5. Pharmacists	4162	145.73
6. ANMs / LHV	3220	112.75
7. Health worker (Male and Female)	1343	47.02
8. ASHA / USHAs	4009	140.38
Health professionals in the state	**20442**	**715.80**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	0
2. Districts with DMHP implemented prior to 12th plan (n)	5
3. Districts covered by DMHP# (%)	55.56%
4. Population covered by DMHP (%)	63.54%
5. Tribal population covered by DMHP (%)	37.40%

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	0	--
2. Medical colleges with psychiatry department	2	0.07
3. General hospitals with psychiatry units	3	0.11
4. % of District hospitals in the state providing outpatient/ in patient mental health services	42.86%	
5. % of Taluka hospitals in the state providing outpatient/ in patient mental health services	--	
6. % of Primary Health Centers in the state providing outpatient mental health services	57.65%	
7. Beds available for mental health inpatient services	90	3.15
8. De-addiction units / Centers	24	0.84
9. Residential half way homes	4	0.14
10. Hostel	1	0.04
11. Vocational training centers	4	0.14
12. Others (Long stay homes, Sheltered workshops, Mobile mental health units, Day care Centers)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	16	0.56
2. Clinical psychologists	14	0.49
3. Nurses with DPN in qualification	6	0.21
4. Psychiatric Social workers	13	0.46
5. Rehabilitation workers and Special education teachers	19	0.67
6. Professional and paraprofessional psychosocial counselors	171	5.99

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	278	34.15%
2. AYUSH doctors	16	2.15%
3. Nurses	215	3.91%
4. Pharmacists	108	2.59%
5. ANMs and Health worker	347	7.60%
6. ASHA / USHAs	550	13.72%

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	--
2. Percentage of mental health budget utilized	--

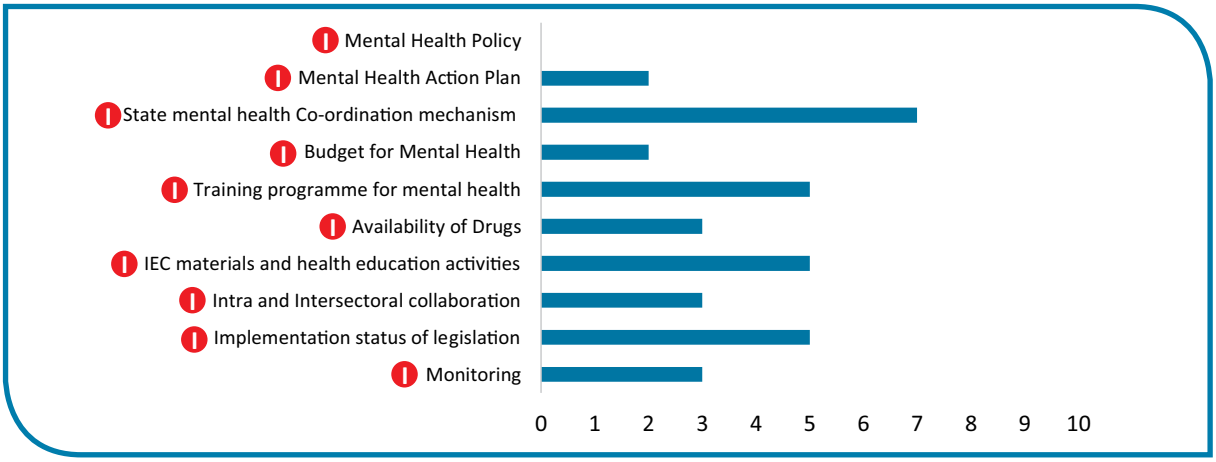
10. Suicide rate (Per 1,00,000 population)	Manipur	India
1. Annual suicide Incidence rate ❙	2	10.6
2. Gender		
i. Male	2.15	14.30
ii. Female	1.34	7.24
3. Age		
i. <14 years	0.37	0.50
ii. 14 and above-below 18 years	3.87	9.52
iii. 18 and above-below 30 years	2.40	17.15
iv. 30 and above-below 45 years	2.37	17.22
v. 45 and above-below 60 years	1.96	15.74
vi. 60 years and above	0.50	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	Prevalence	Treatment gap
Common mental disorders ❙	13.3%	87.4%
Severe mental disorders ❙	1.1%	93.8%
Alcohol use disorder ❙	5.1%	90.8%
Depressive disorder ❙	3.7%	83.3%
High suicidal risk ❙	1.4%	-

Source: National Mental health Survey.

12. Mental health score card



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2. Prof. G Gururaj, Principal Investigator - NMHS India and Head Dept. of Epidemiology/Center for Public Health, NIMHANS, Bengaluru. Email: epiguru@yahoo.com

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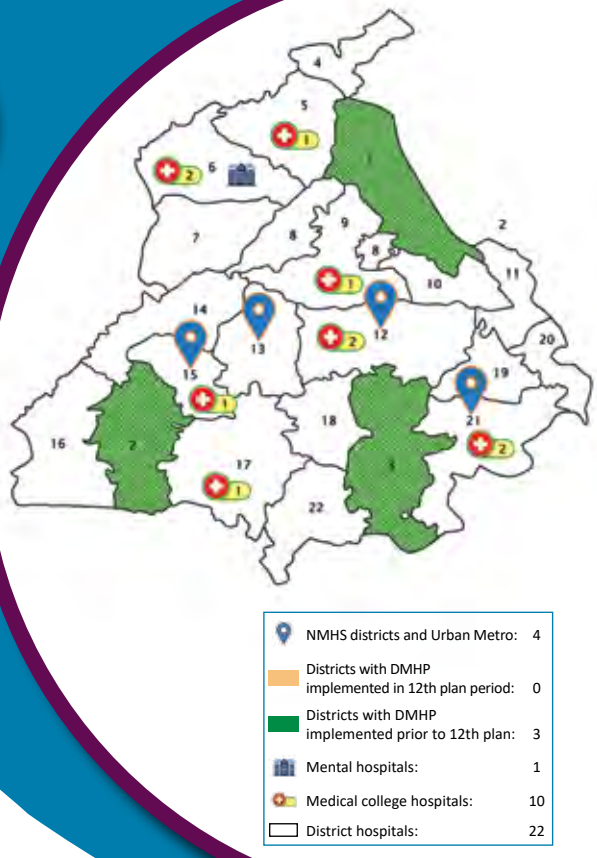
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Punjab



List of districts:

1. Hoshiarpur
2. Muktsar (Sri Muktsar Sahib)
3. Sangrur
4. Pathankot
5. Gurdaspur
6. Amritsar
7. Tarn Taran
8. Kapurthala
9. Jalandhar
10. Shahid Bhagat Singh Nagar
11. Rupnagar
12. Ludhiana
13. Moga
14. Firozpur
15. Faridkot
16. Fazilka
17. Bathinda
18. Barnala
19. Fatehgarh Sahib
20. Sahibzada Ajit Singh Nagar
21. Patiala
22. Mansa

1. Demographic characteristics

1.	Population (in crores)	2.77
2.	Sex ratio (females per 1000 males)	895
3.	Male population (%)	52.77
4.	Female population (%)	47.23
5.	<18 age group population (%)	31.50
6.	60 and above age group population (%)	10.33
7.	Overall literacy rate (%)	75.84
7.1.	Male literacy rate (%)	80.44
7.2.	Female literacy rate (%)	70.73
8.	Urban population (%)	37.48
9.	Tribal population (%)	--

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	20
2.	Districts as on 2016# (n)	22
3.	Taluka/Sub-district * (n)	77
4.	Villages* (n)	12,581
5.	Towns with 1 lakh to <1 million population* (n)	16
6.	Million plus cities*(n)	2
7.	Per capita income in 2013-2014 (in INR)$	92,350
8.	Poverty Headcount Ratio$$	8.23

*Source: *Census 2011, # - http://www.archive.india.gov.in/knowindia/districts/andhra1.php?stateid=PB; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	3	0.01	1. Super specialty hospitals	73	0.26
2. Medical college hospitals	3	0.01	2. Medical college hospital(s)	7	0.03
3. District hospitals	22	0.08	3. Hospitals	1092	3.94
4. Sub district/ Taluka hospitals	41	0.15	4. Nursing homes	3001	10.82
5. Community health centers	163	0.59	5. Registered clinics	672	2.42
6. Primary health centers	520	1.87	6. Non allopathic hospitals	172	0.62
7. Sub centers	2951	10.64			
8. Dispensaries	1186	4.27			
9. AYUSH hospitals	5	0.02			
10. AYUSH dispensaries	507	1.83			
11. ESI and CGHS hospitals	23	0.08			
Health care facilities in public sector	**5424**	**19.55**	**Health care facilities in private sector**	**5017**	**18.08**
Health care facilities (public and private)				**10441**	**37.63**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	1310	4.72
2. Doctors – MBBS	3121	11.24
3. AYUSH doctors	10131	36.51
4. Registered Nurses and Midwives	76680	276.39
5. Pharmacists	40162	144.76
6. ANMs / LHV	25613	92.32
7. Health worker (Male and Female)	6037	21.76
8. ASHA / USHAs	19154	69.04
Health professionals in the state	**182208**	**656.76**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	0
2. Districts with DMHP implemented prior to 12th plan (n)	3
3. Districts covered by DMHP# (%)	13.64%
4. Population covered by DMHP (%)	14.94%

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	1	<0.01
2. Medical colleges with psychiatry department	7	0.03
3. General hospitals with psychiatry units	29	0.10
4. % of district hospitals in the state providing outpatient/ in patient mental health services	63.64%	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	17.07%	
6. % of Primary Health Centers in the state providing outpatient mental health services	--	
7. Beds available for mental health inpatient services	780	2.81
8. De-addiction units / Centers	38	0.14
9. Others (Residential half way homes, Long stay homes, Hostel, Vocational Training centers, Sheltered workshops, Mobile mental health units, Day care Centers)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	127	0.46
2. Clinical psychologists	12	0.04
3. Psychiatric Social workers	32	0.12
4. Professional and paraprofessional psychosocial counselors	288	1.04
5. Nurses with DPN qualification, Rehabilitation workers and Special education teachers	--	

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	380	12.18%
2. Nurses	3	<0.01%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	--
2. Percentage of mental health budget utilized	--

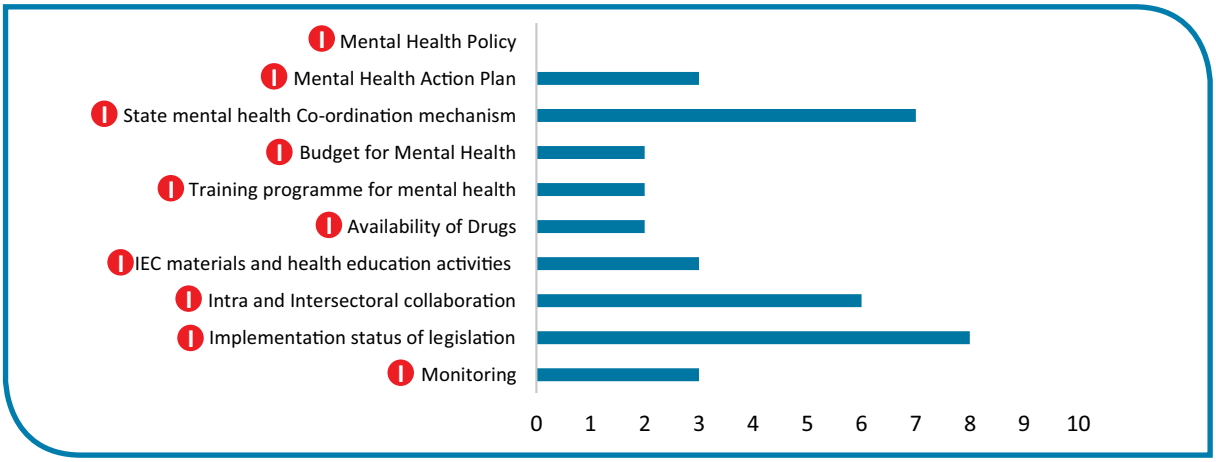
10. Suicide rate (Per 1,00,000 population)	Punjab	India
1. Annual suicide Incidence rate ❙	3.3	10.6
Gender		
i. Male	4.85	14.30
ii. Female	1.78	7.24
3. Age		
i. <14 years	0.11	0.50
ii. 14 and above-below 18 years	2.79	9.52
iii. 18 and above-below 30 years	5.87	17.15
iv. 30 and above-below 45 years	5.21	17.22
v. 45 and above-below 60 years	4.19	15.74
vi. 60 years and above	1.15	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	13.0%	79.7%
Severe mental disorders ❙	0.5%	57.1%
Alcohol use disorder ❙	7.9%	81.4%
Depressive disorder ❙	1.8%	82.1%
High suicidal risk ❙	0.5%	-

Source: National Mental health Survey.

12. Mental health score card



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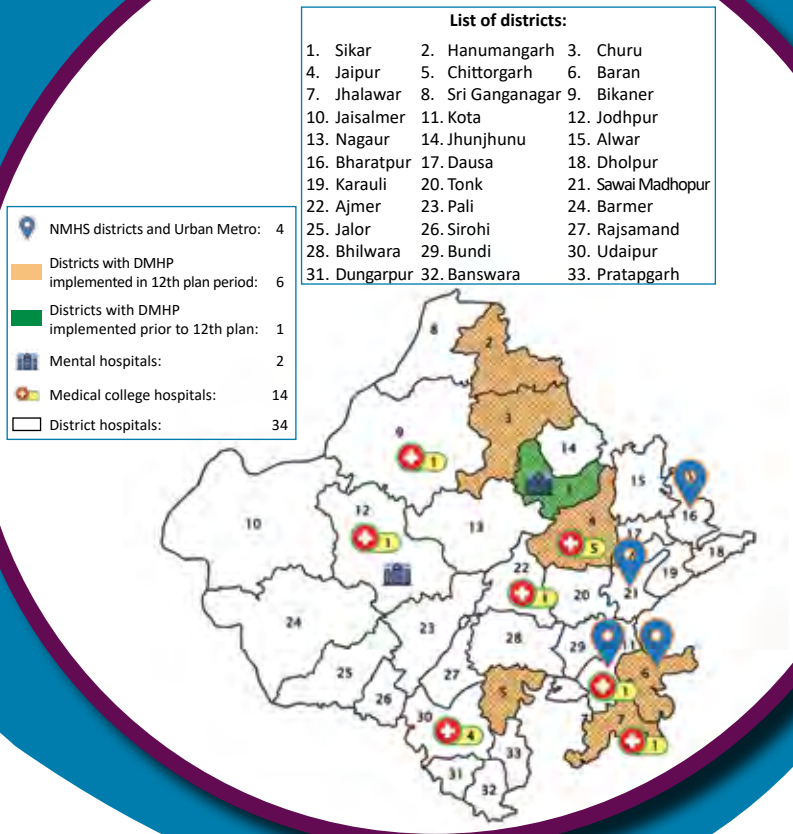
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Rajasthan



1. Demographic characteristics

1.	Population (in crores)	6.85
2.	Sex ratio (females per 1000 males)	928
3.	Male population (%)	51.86
4.	Female population (%)	48.14
5.	<18 age group population (%)	41.05
6.	60 and above age group population (%)	7.46
7.	Overall literacy rate (%)	66.11
7.1.	Male literacy rate (%)	79.19
7.2.	Female literacy rate (%)	52.12
8.	Urban population (%)	24.87
9.	Tribal population (%)	13.48

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	33
2.	Districts as on 2016 (n)	33
3.	Taluka/Sub-district * (n)	244
4.	Villages* (n)	44,672
5.	Towns with 1 lakh to <1 million population* (n)	27
6.	Million plus cities*(n)	3
7.	Per capita income in 2013-2014 (in INR)$	65,974
8.	Poverty Headcount Ratio$$	14.78

*Source: *Census 2011; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	2	<0.01	1. Super specialty hospitals	5	<0.01
2. Medical college hospitals	8	0.01	2. Medical college hospital(s)	6	<0.01
3. District hospitals	34	0.05	3. Hospitals	--	--
4. Sub district/ Taluka hospitals	19	0.03	4. Nursing homes	--	--
5. Community health centers	568	0.83	5. Registered clinics	--	--
6. Primary health centers	2088	3.05	6. Non allopathic hospitals	--	--
7. Sub centers	14407	21.02			
8. Dispensaries	194	0.28			
9. AYUSH hospitals	126	0.18			
10. AYUSH dispensaries	3879	5.66			
11. ESI and CGHS hospitals	79	0.12			
Health care facilities in public sector	**21404**	**31.22**	**Health care facilities in private sector**	**11**	**0.02**
Health care facilities (public and private)				**21415**	**31.24**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	3557	5.18
2. Doctors – MBBS	7877	11.49
3. AYUSH doctors	17254	25.17
4. Registered Nurses and Midwives	175542	256.08
5. Pharmacists	38156	55.66
6. ANMs / LHV	106544	155.42
7. Health worker (Male and Female)	17966	26.20
8. ASHA / USHAs	47370	69.10
Health professionals in the state	**414266**	**604.34**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	6
2. Districts with DMHP implemented prior to 12th plan (n)	1
3. Districts covered by DMHP# (%)	21.21
4. Population covered by DMHP (%)	25.23
5. Tribal population covered by DMHP (%)	13.96

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	2	<0.01
2. Medical colleges with psychiatry department	5	<0.01
3. General hospitals with psychiatry units	--	--
4. % of district hospitals in the state providing outpatient/ in patient mental health services	--	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	--	
6. % of Primary Health Centers in the state providing outpatient/ in patient mental health services	--	
7. Beds available for mental health inpatient services	512	0.75
8. De-addiction units / Centers	6	<0.01
9. Vocational training centers	1	<0.01
10. Others (Residential half way homes, Long stay homes, Hostel, Sheltered workshops, Mobile mental health units, Day care Centers)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	68	0.10
2. Clinical psychologists	9	0.01
3. Nurses with DPN in qualification	6	0.01
4. Psychiatric Social workers	6	0.01
5. Professional and paraprofessional psychosocial counselors, Rehabilitation workers and Special education teachers	--	--

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	398	5.05%
2. Nurses	6	<0.01%
3. ANMs / Health worker	2167	1.74%
4. ASHA/USHAs	2594	5.48%
5. Doctors – Specialists, AYUSH doctors, Pharmacists	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	--
2. Percentage of mental health budget utilized	--

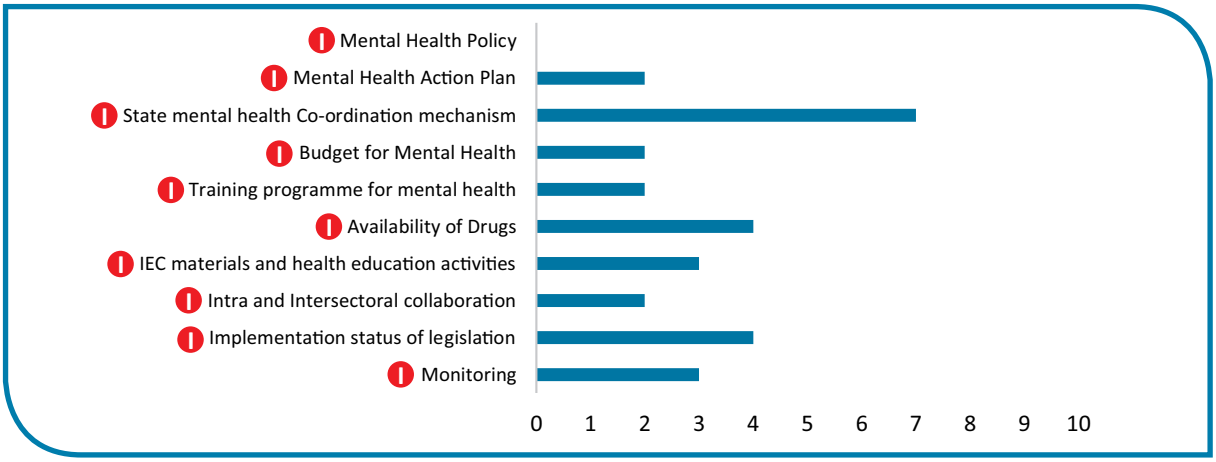
10. Suicide rate (Per 1,00,000 population)	Rajasthan	India
1. Annual suicide Incidence rate ❙	6.3	10.6
2. Gender		
i. Male	9.10	14.30
ii. Female	3.71	7.24
3. Age		
i. <14 years	0.35	0.50
ii. 14 and above-below 18 years	5.17	9.52
iii. 18 and above-below 30 years	11.96	17.15
iv. 30 and above-below 45 years	11.76	17.22
v. 45 and above-below 60 years	8.51	15.74
vi. 60 years and above	3.33	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	10.1%	87.4%
Severe mental disorders ❙	0.8%	71.4%
Alcohol use disorder ❙	2.6%	85.7%
Depressive disorder ❙	2.7%	93.9%
High suicidal risk ❙	1.0%	-

Source: National Mental health Survey.

12. Mental health score card



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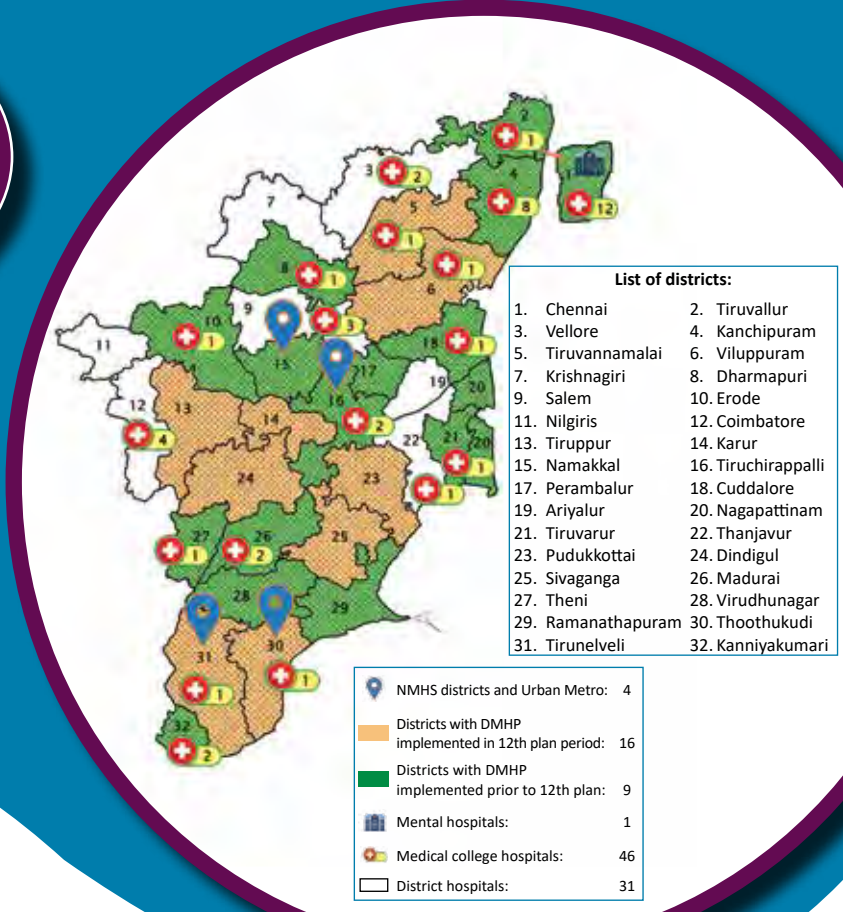
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

Tamil Nadu



1. Demographic characteristics

1.	Population (in crores)	7.21
2.	Sex ratio (females per 1000 males)	996
3.	Male population (%)	50.09
4.	Female population (%)	49.91
5.	<18 age group population (%)	28.64
6.	60 and above age group population (%)	10.41
7.	Overall literacy rate (%)	80.09
7.1.	Male literacy rate (%)	86.77
7.2.	Female literacy rate (%)	73.44
8.	Urban population (%)	48.40
9.	Tribal population (%)	1.10

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	32
2.	Districts as on 2016 (n)	32
3.	Taluka/Sub-district * (n)	215
4.	Villages* (n)	15,979
5.	Towns with 1 lakh to <1 million population* (n)	28
6.	Million plus cities*(n)	4
7.	Per capita income in 2013-2014 (in INR)$	1,12,664
8.	Poverty Headcount Ratio$$	11.71

*Source: *Census 2011; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health care facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	1	<0.01	1. Super specialty hospitals	13	0.02
2. Medical college hospitals	23	0.03	2. Medical college hospital(s)	23	0.03
3. District hospitals	31	0.04	3. Hospitals	3662	5.07
4. Sub district/ Taluka hospitals	239	0.33	4. Nursing homes	2040	2.82
5. Community health centers	385	0.53	5. Registered clinics	--	--
6. Primary health centers	1750	2.42	6. Non allopathic hospitals	--	--
7. Sub centers	8706	12.06			
8. Dispensaries	195	0.27			
9. AYUSH hospitals	1368	1.89			
10. AYUSH dispensaries	1425	1.97			
11. ESI and CGHS hospitals	30	0.04			
Health care facilities in public sector	**13051**	**18.08**	**Health care facilities in private sector**	**5738**	**7.95**
Health care facilities (public and private)				**18789**	**26.04**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resources in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	3718	5.15
2. Doctors – MBBS	11347	15.73
3. AYUSH doctors	32544	45.11
4. Registered Nurses and Midwives	236161	327.33
5. Pharmacists	58466	81.04
6. ANMs / LHV	67135	93.05
7. Health worker (Male and Female)	10245	14.20
8. ASHA / USHAs	2560	3.55
Health professionals in the state	**422176**	**585.16**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	9
2. Districts with DMHP implemented prior to 12th plan (n))	16
3. Districts covered by DMHP# (%)	78.13%
4. Population covered by DMHP (%)	76.92%
5. Tribal population covered by DMHP (%)	63.48%

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6. Mental Health care facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	1	<0.01
2. Medical colleges with psychiatry department	20	0.03
3. General hospitals with psychiatry units	16	0.02
4. % of district hospitals in the state providing outpatient/ in patient mental health services	51.61%	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	28.87%	
6. % of Primary Health Centers in the state providing outpatient mental health services	100%	
7. Beds available for mental health inpatient services	3260	4.52
8. Mobile mental health units	432	0.60
9. Day care Centers	137	0.19
10. De-addiction units / Centers	120	0.17
11. Residential half way homes	43	0.06
12. Long stay homes	7	0.01
13. Vocational Training centers	17	0.02
14. Others (Hostel; Sheltered workshops)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Availability of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	214	0.30
2. Clinical psychologists	68	0.09
3. Psychiatric social workers	37	0.05
4. Rehabilitation workers and special education teachers	1911	2.65
5. Professional and paraprofessional psychosocial counselors	1153	1.60
6. Nurses with DPN in qualification	--	--

DPN-Diploma in Psychiatric Nursing.

8. Human resources trained in Mental health		
Health personnel trained in mental health	**Number trained**	**Percentage**
1. Doctors – MBBS	1334	11.76%
2. Nurses	7555	3.20%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental Health Financing	
1. Percentage of total health budget allotted for mental health by the state health department	--
2. Percentage of mental health budget utilized	--

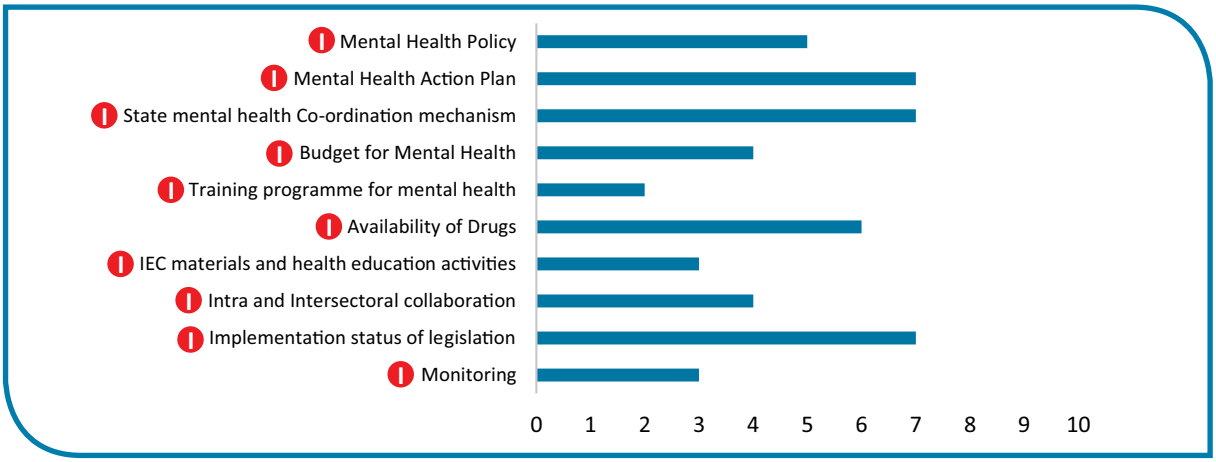
10. Suicide rate (Per 1,00,000 population)	Tamil Nadu	India
1. Annual suicide Incidence rate ❙	23.4	10.6
2. Gender		
i. Male	30.34	14.30
ii. Female	14.32	7.24
3. Age		
i. <14 years	1.72	0.50
ii. 14 and above-below 18 years	18.94	9.52
iii. 18 and above-below 30 years	31.46	17.15
iv. 30 and above-below 45 years	30.78	17.22
v. 45 and above-below 60 years	29.70	15.74
vi. 60 years and above	18.96	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	11.3%	94.8%
Severe mental disorders ❙	0.5%	72.7%
Alcohol use disorder ❙	5.9%	97.5%
Depressive disorder ❙	4.5%	96.3%
High suicidal risk ❙	0.6%	-

Source: National Mental health Survey

12. Mental health score card



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❙ **Indicator.**

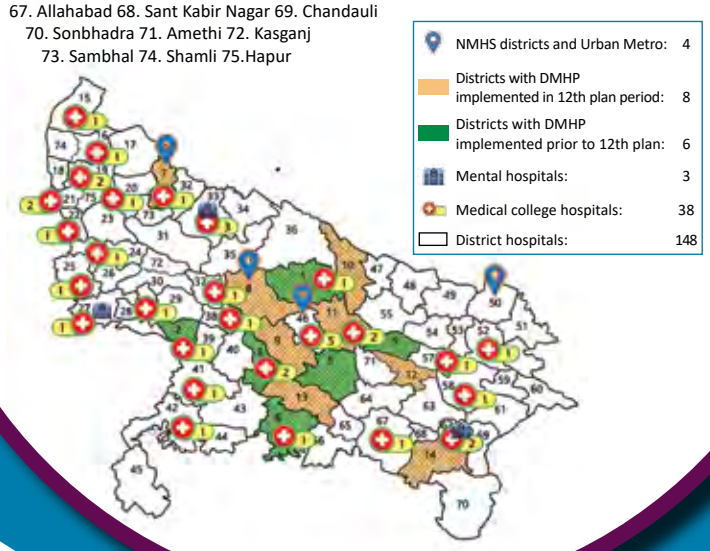
NMHS 2016: Mental Health Systems Assessment

Fact sheet

Uttar Pradesh

List of districts:

1. Sitapur 2. Etawah 3. Kanpur Nagar 4. Faizabad 5. Rae Bareli 6.Banda 7.Moradabad 8. Hardoi 9. Unnao 10. Bahraich 11. Barabanki 12. Sultanpur 13.Fatehpur 14. Mirzapur 15. Saharanpur 16. Muzaffarnagar 17. Bijnor 18. Bagpat 19. Meerut 20. Amroha 21. Ghaziabad 22. Gautam Buddha Nagar 23. Bulandshahr 24. Aligarh 25. Mathura 26. Hathras 27. Agra 28. Firozabad 29. Mainpuri 30. Etah 31. Badaun 32. Rampur 33. Bareilly 34. Pilibhit 35. Shahjahanpur 36. Lakhimpur Kheri 37. Farrukhabad 38. Kannauj 39.Auraiya 40. Kanpur Dehat 41. Jalaun 42. Jhansi 43. Hamirpur 44. Mahoba 45. Lalitpur 46.Lucknow 47. Shravasti 48. Balrampur 49. Siddharthnagar 50. Maharajganj 51. Kushinagar 52. Gorkakhpur 53. Sant Ravidas Nagar 54. Basti 55. Gonda 56. Deoria 57. Ambedkar Nagar 58. Azamgarh 59. Mau 60. Ballia 61. Ghazipur 62. Varanasi 63. Jaunpur 64. Pratapgarh 65. Kaushambi 66. Chitrakoot 67. Allahabad 68. Sant Kabir Nagar 69. Chandauli 70. Sonbhadra 71. Amethi 72. Kasganj 73. Sambhal 74. Shamli 75.Hapur



1. Demographic characteristics

1.	Population (in crores)	19.98
2.	Sex ratio (females per 1000 males)	912
3.	Male population (%)	52.29
4.	Female population (%)	47.71
5.	<18 age group population (%)	42.71
6.	60 and above age group population (%)	7.73
7.	Overall literacy rate (%)	67.68
7.1.	Male literacy rate (%)	77.28
7.2.	Female literacy rate (%)	57.18
8.	Urban population (%)	22.27
9.	Tribal population (%)	0.57

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	71
2.	Districts as on 2016# (n)	75
3.	Taluka/Sub-district * (n)	312
4.	Villages* (n)	1,06,773
5.	Towns with 1 lakh to <1 million population* (n)	57
6.	Million plus cities*(n)	7
7.	Per capita Income in 2013-2014 (in INR)$	36,250
8.	Poverty Headcount Ratio$$	29.5

*Source: *Census 2011, # - http://www.archive.india.gov.in/knowindia/districts/andhra1.php?stateid=UP; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	9	<0.01	1. Super specialty hospitals	43	0.02
2. Medical college hospitals	16	0.01	2. Medical college hospital(s)	22	0.01
3. District hospitals	148	0.07	3. Hospitals	--	
4. Sub district/ Taluka hospitals	--	--	4. Nursing homes		
5. Community health centers	778	0.39	5. Registered clinics		
6. Primary health centers	3497	1.75	6. Non allopathic hospitals		
7. Sub centers	20521	10.27			
8. Dispensaries	501	0.25			
9. AYUSH hospitals	1983	0.99			
10. AYUSH dispensaries	2014	1.00			
11. ESI and CGHS hospitals	147	0.07			
Health care facilities in public sector	**29614**	**14.82**	**Health care facilities in private sector**	**65**	**0.03**
Health care facilities (public and private)				**29679**	**14.85**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	3910	1.95
2. Doctors – MBBS	10798	5.40
3. AYUSH doctors	89625	44.85
4. Registered Nurses and Midwives	42612	21.32
5. Pharmacists	30276	15.15
6. ANMs / LHV	25498	12.76
7. Health worker (Female and Male)	26883	13.45
8. ASHA / USHAs	156042	78.09
Health professionals in the state	**385644**	**192.98**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	8
2. Districts with DMHP implemented prior to 12th plan (n)	6
3. Districts covered by DMHP# (%)	18.67%
4. Population covered by DMHP (%)	23.01%
5. Tribal population covered by DMHP (%)	3.99%

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	3	<0.01
2. Medical colleges with psychiatry department	28	0.01
3. General hospitals with psychiatry units	16	<0.01
4. % of district hospitals in the state providing outpatient/ in patient mental health services	10.81%	
5. % of sub-district hospitals in the state providing outpatient/ in patient mental health services	--	
6. % of Primary Health Centers in the state providing outpatient/ in patient mental health services	--	
7. Beds available for mental health inpatient services	2117	1.06
8. Day care Centers	--	--
9. De-addiction units / Centers	--	--
10. Residential half way homes	--	--
11. Vocational Training centers	--	--
12. Others (Long stay homes, Hostel, , Sheltered workshops, Mobile mental health units,)	--	

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	297	0.15
2. Clinical psychologists	49	0.02
3. Nurses with DPN in qualification	14	<0.01
4. Psychiatric Social workers	44	0.02
5. Professional and paraprofessional psychosocial counselors, Rehabilitation workers and Special education teachers	--	--

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	--	--
2. Nurses	60	0.14%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	0.35%
2. Percentage of mental health budget utilized	96.81%

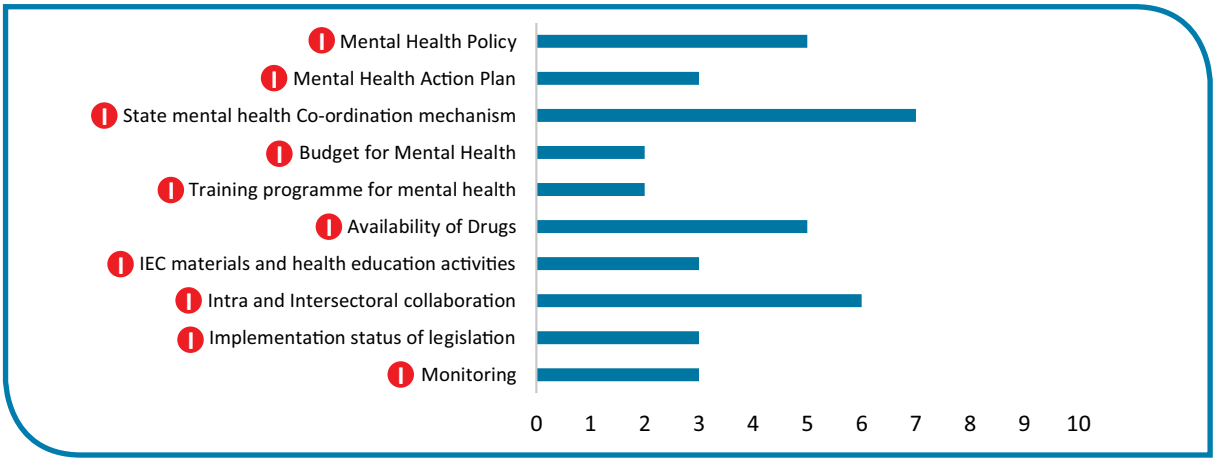
10. Suicide rate (Per 1,00,000 population)	Uttarpradesh	India
1. Annual suicide Incidence rate ❙	**1.7**	**10.6**
2. Gender		
i. Male	2.01	14.30
ii. Female	1.56	7.24
3. Age		
i. <14 years	0.12	0.50
ii. 14 and above-below 18 years	1.66	9.52
iii. 18 and above-below 30 years	4.12	17.15
iv. 30 and above-below 45 years	2.90	17.22
v. 45 and above-below 60 years	1.73	15.74
vi. 60 years and above	0.64	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	5.9%	86.7%
Severe mental disorders ❙	0.3%	75.0%
Alcohol use disorder ❙	1.5%	100.0%
Depressive disorder ❙	1.9%	84.0%
High suicidal risk ❙	0.9%	-

Source: National Mental Health Survey

12. Mental health score card



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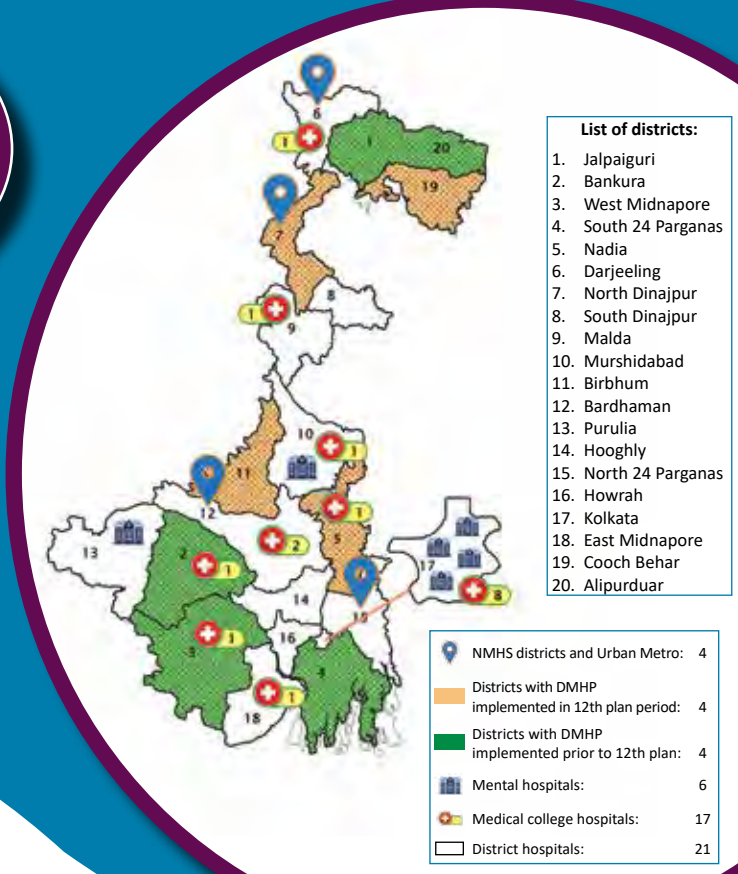
❙ **Indicator.**

NMHS 2016: Mental Health Systems Assessment

Fact sheet

West Bengal



1. Demographic characteristics

1.	Population (in crores)	9.13
2.	Sex ratio (females per 1000 males)	950
3.	Male population (%)	51.28
4.	Female population (%)	48.72
5.	<18 age group population (%)	32.87
6.	60 and above age group population (%)	8.48
7.	Overall literacy rate (%)	76.26
7.1.	Male literacy rate (%)	81.69
7.2.	Female literacy rate (%)	70.54
8.	Urban population (%)	31.87
9.	Tribal population (%)	5.80

Source: Census 2011.

2. Administrative and economic characteristics

1.	Districts*(n)	19
2.	Districts as on 2016 (n)#	20
3.	Taluka/Sub-district * (n)	341
4.	Villages* (n)	40,203
5.	Towns with 1 lakh to <1 million population* (n)	27
6.	Million plus cities*(n)	2
7.	Per capita Income in 2013-2014 (in INR)$	70,059
8.	Poverty Headcount Ratio$$	20.43

*Source: *Census 2011, # - https://wb.gov.in/portal/web/guest/district; $-Central Statistical Organization; $$-NSSO 2011-12; n-number.*

3. General Health Care Facilities (GHCF)					
Public sector	**Number**	**Availability per 1,00,000 population**	**Private sector**	**Number**	**Availability per 1,00,000 population**
1. Super specialty hospitals	34	0.04	1. Super specialty hospitals	20	0.02
2. Medical college hospitals	14	0.02	2. Medical College hospital(s)	3	<0.01
3. District hospitals	21	0.02	3. Hospitals	71	0.08
4. Sub district/ Taluka hospitals	103	0.11	4. Nursing homes	75	0.08
5. Community health centers	348	0.38	5. Registered clinics	--	--
6. Primary health centers	909	0.99	6. Non allopathic hospitals	2	<0.01
7. Sub centers	10356	11.35			
8. Dispensaries	103	0.11			
9. AYUSH hospitals	17	0.02			
10. AYUSH dispensaries	2044	2.24			
11. ESI and CGHS hospitals	37	0.04			
Health care facilities in public sector	**13986**	**15.32**	**Health care facilities in private sector**	**171**	**0.19**
Health care facilities (public and private)				**14157**	**15.51**

Source: Information for public health sector-India National Health Profile-2015; Information for private sector-Respective state PI.

4. Human resource in GHCF		
Types of human resource	**Number**	**Availability per 1,00,000 population**
1. Specialists doctors*	6085	6.66
2. Doctors – MBBS	58735	64.34
3. AYUSH doctors	47463	51.99
4. Registered Nurses and Midwives	56124	61.48
5. Pharmacists	89630	98.19
6. ANMs / LHV	71875	78.74
7. Health worker (Male and Female)	20756	22.73
8. ASHA / USHAs	--	--
Total number of health professionals in the state	**350668**	**384.18**

Note: (*) - Includes all types of specialist doctors; ANM-Auxiliary Nurse Midwives; LHV-Lady Health Visitor; ASHA-Accredited Social Health Activist; USHA-Urban Social Health Activist.
Source: Select Information - India National Health Profile 2015.

5. Coverage of District Mental Health Programme (DMHP)	
1. Districts with DMHP implemented in 12th plan period*(n)	4
2. Districts with DMHP implemented prior to 12th plan (n)	4
3. Districts covered by DMHP# (%)	40.00
4. Population covered by DMHP (%)	51.78
5. Tribal population covered by DMHP (%)	56.45

(*) Between 2012 and January 2016; #-Newly sanctioned DMHP districts in 2016 are not included; n-number.

6.Mental Health Care Facilities (MHCF)		
Availability of MHCF	**Number**	**Availability per 1,00,000 population**
1. Mental hospitals	6	<0.01
2. Medical colleges with psychiatry department	7	<0.01
3. General hospitals with psychiatry units	11	0.01
4. % of district hospitals in the state providing outpatient/ in patient mental health services	52.38%	
5. % of taluka hospitals in the state providing outpatient/ in patient mental health services	--	
6. % of Primary Health Centers in the state providing outpatient mental health services	--	
7. Beds available for mental health inpatient services	1696	1.86
8. Day care Centers	4	<0.01
9. De-addiction units / Centers	30	0.03
10. Residential half way homes	9	0.01
11. Long stay homes	5	<0.01
12. Sheltered workshops	3	<0.01
13. Vocational Training centers	5	<0.01
14. Mobile mental health units	--	--

Information pertains to both public and private health care facilities.

7. Human Resources for Mental Health (HRMH)		
Types of HRMH	**Number**	**Availability per 1,00,000 population**
1. Psychiatrists	506	0.55
2. Clinical psychologists	42	0.05
3. Psychiatric Social workers	110	0.12
4. Rehabilitation workers and Special education teachers	229	0.25
5. Professional and paraprofessional psychosocial counselors	407	0.45
6. Nurses with DPN in qualification	12	0.01

DPN-Diploma in Psychiatric Nursing.

8. Human resource trained in mental health		
Health personnel trained in mental health in the last 3 years	**Number trained**	**Percentage**
1. Doctors – MBBS	2500	4.26%
2. Nurses	18	0.03%
3. Doctors – Specialists, AYUSH doctors, Pharmacists, ANMs / Health worker and ASHA / USHAs	--	

Information pertains to public health sector only.

9. Mental health financing	
1. Percentage of total health budget allotted for mental health by the state health department	3.92%
2. Percentage of mental health budget utilized	83.81%

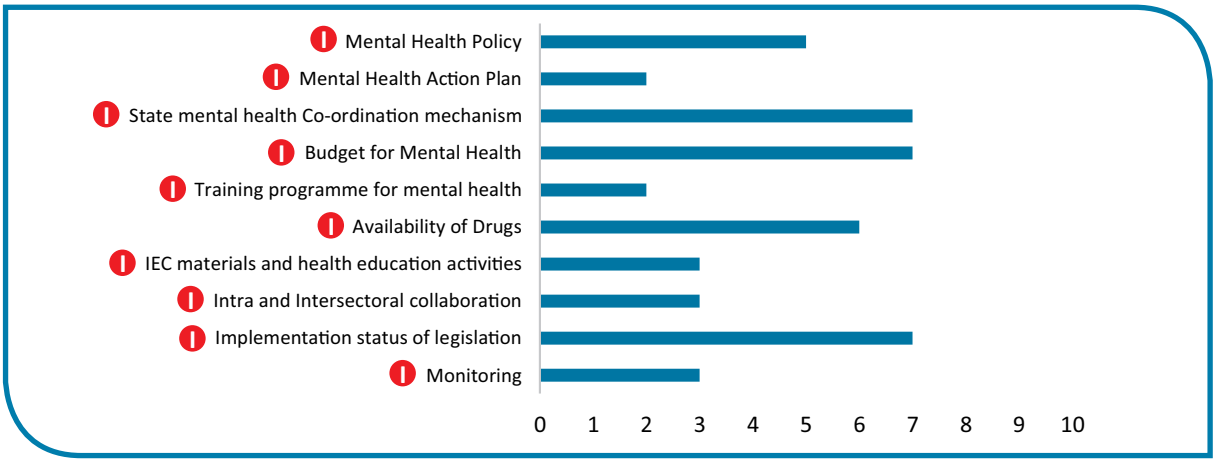
10. Suicide rate (Per 1,00,000 population)	West Bengal	India
1. Annual suicide Incidence rate ❙	15.5	10.6
2. Gender		
i. Male	18.98	14.30
ii. Female	12.20	7.24
3. Age		
i. <14 years	1.33	0.50
ii. 14 and above-below 18 years	20.88	9.52
iii. 18 and above-below 30 years	23.67	17.15
iv. 30 and above-below 45 years	24.32	17.24
v. 45 and above-below 60 years	15.86	15.74
vi. 60 years and above	9.75	9.40

Source: National Crime Records Bureau - 2014.

11. Burden and treatment gap of mental health disorders		
Mental Health disorders	**Prevalence**	**Treatment gap**
Common mental disorders ❙	11.3%	85.2%
Severe mental disorders ❙	2.3%	87.2%
Alcohol use disorder ❙	3.0%	90.0%
Depressive disorder ❙	4.3%	90.2%
High suicidal risk ❙	1.7%	-

Source: National Mental health Survey.

12. Mental health score card



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Disclaimer: The data for the fact sheet has been collated from multiple secondary sources and discussed during the State level consensus meeting; based on this, the best possible information has been provided. More details of data collection methods are provided in the report and available on request.

❙ **Indicator.**

Annexure - 3

Table 1: Availability of various drugs for mental and neurological disorders across the NMHS states

	AS	CG	GJ	JH	KL	MP	MN	PB	RJ	TN	UP	WB
Lithium carbonate	3	4	5	3	5	1	1	4	5	3	1	5
Sodium Valproate	4	4	4	3	5	4	3	3	5	5	4	5
Carbamazepine	4	5	5	3	5	5	3	3	4	4	4	5
Chlorpromazine	5	5	5	3	5	5	1	3	4	5	1	5
Haloperidol Inj	5	5	5	3	3	5	3	5	5	2	1	5
Olanzapine	5	4	5	3	5	3	3	4	4	1	4	5
Amitriptyline	5	4	2	3	5	1	1	1	4	5	4	5
Imipramine	5	4	2	1	5	1	3	1	5	5	3	3
Fluoxetine	5	4	5	3	5	3	3	3	5	4	4	5
Alprazolam	1	4	5	3	5	5	3	3	5	5	4	5
Diazepam	5	5	5	3	5	5	3	3	5	5	1	5
Phenobarbitone	4	5	2	3	5	5	2	3	5	5	4	5
Phenytoin	4	4	5	3	5	5	3	3	5	5	4	5
Lorazepam	5	5	5	1	5	5	4	4	5	3	4	5
Ethosuximide	1	4	5	1	1	2	1	1	5	1	1	1
Magnesium sulphate	1	4	5	3	1	5	1	1	5	5	1	3

Note: 5=Always; 4=Many times; 3=Some times; 2=Interrupted supply 1=Never/Not available

Table 2: Availability of drugs for mental and neurological disorders at various health care facilities across NMHS states

	PHC	Taluka/Sub-district hospital	District hospital
AS	Never/Not available	Some times	Many times
CG	Never/Not available	--	Many times
GJ	Many times	Many times	Interrupted supply
JH	Never/Not available	Never/Not available	Some times
KL	Some times	Many times	Always
MP	Some times	Many times	Always
MN	Some times	Some times	Some times
PB	Never/Not available	Interrupted supply	Some times
RJ	Many times	Never/Not available	Never/Not available
TN	Many times	Always	Always
UP	Interrupted supply	Interrupted supply	Many times
WB	Interrupted supply	Interrupted supply	Always

Notes

Person(s) with mental disorder(s) can be creative and productive with good care, caring society and availability of opportunities

Flower made from pencil wood waste
Reproduced from work done by persons on treatment at the Department of Psychiatric Rehabilitation services, NIMHANS, Bengaluru