सत्यमेव जयते

National Mental Health Survey,

Madhya Pradesh State Report- 2015-16

Supported by

Ministry of Health & Family Welfare,
Government of India, New Delhi

Co-ordinated by

National Institute of Mental Health and Neurosciences,
Bangalore- 560029

Implemented by

All India Institute of Medical Sciences Bhopal,
Saket Nagar, Bhopal -462020, Madhya Pradesh

National Mental Health Survey (NMHS)
Madhya Pradesh Team

Principal Investigator: Dr Arun M. Kokane, Additional Professor of Community and Family Medicine, All India Institute of Medical Sciences, Bhopal

Co-Principal Investigator: Prof Dr RajniChatterji, Prof of Psychiatry BMHRC, Bhopal

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3. Mrs. Sukanya Ray, Clinical Psychologist, Department of Psychiatry AIIMS Bhopal

State Advisory Committee:

State Advisory Committee was constituted to facilitate the field data collection and mental health system assessment under NMHS. The chairman of committee was Dr R. N. Sahu,Professor & Head, Department of Psychiatry, GMC Bhopal who is also State Mental Health Authority.

The following were nominated members:

Dr. R. N. Sahu, Prof. Psychiatry, GMC Bhopal	- Chairman
Dr Arun M Kokane, Addl. Prof, CFM, AIIMS Bhopal	- Member Secretary
Dr Rajni Chatterji, Prof. Psychiatry, BMHRC, Bhopal	-Member
Dr. D. K. Pal, Prof. PSM, GMC Bhopal	- Member
Dr. K. L. Sahu, Director NCD, Govt. of MP	-Member
Dr B. S. Ohari, Ex Joint Director, Govt. of MP	- Member
Dr Abhijit Pakhare, Asst. Prof, CFM, AIIMS Bhopal	- Member
Dr J. L. Agarwal, Asst. Prof, Psychiatry, GMC Bhopal	- Member
Mr. Rahul Sharma, Psychologist, GMC Bhopal	- Member

The data collection team:

The data collection team comprised of: Mr Narendra Sinha, Project Coordinator; Sandeep Soni (Field Data collector. FDC), Pratima Deshmukh (FDC), Hemant Singh Chourasiya (FDC), Mukesh Kumar Chandel (FDC), Avani Pathak (FDC), Jyoti Chauhan(FDC) and Vandana Shukla (FDC).

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रुस्तम सिंह

I.P.S. (Rtd.)

मंत्री

लोक स्वास्थ्य एवं परिवार कल्याण, आयुष

मध्यप्रदेश शासन

क्र. ९-1./म./लो.स्वा.एवं प.क.,आ./201

भोपाल, दिनांक 11.04.2017

//संदेश//

मुझे यह जानकर प्रसन्नता हुई कि ऑल इंडिया इंस्टीट्यूट आफ मेडीकल साईंस भोपाल द्वारा प्रदेश के चार जिलों में मेंटल हेल्थ सर्वे किया गया है जिसकी रिपोर्ट तैयार कर प्रकाशित की जा रही है ।

भारत सरकार के स्वास्थ्य मंत्रालय के निर्देशों पर एम्स द्वारा प्रदेश में किया गया यह एक अभिनव प्रयास सिद्ध होगा । सर्वे रिपोर्ट के माध्यम से प्रदेश के चार जिलों में जो ऑकड़े सामने आयेंगे उसके आधार पर प्रदेश की जनता को स्वास्थ्य हेतु और बेहतर प्रयास किये जाने में सहायता प्राप्त होगी । सर्वे रिपोर्ट के प्रकाशन के लिये मेरी ओर से हार्दिक शुभकामनायें स्वीकार करें ।

आपका

(रूस्तम सिंह)

सत्यमेव जयते

Mrs. Gauri Singh, IAS
Principal Secretary, Ministry of Health and Family Welfare,
Govt. of Madhya Pradesh.

MESSAGE

I am happy to learn that All India Institute of Medical Sciences Bhopal has completed National Mental Health Survey in the state of Madhya Pradesh and ready to release the findings in the form of National Mental Health Survey Report 2015-16 - Madhya Pradesh. (NMHS-MP)

The rapid pace of globalization and urbanization has resulted in profound changes globally and in India too. This has affected mental health of individuals, families and societies in a significant way and increased the vulnerability of individuals, families and communities. The popular saying that "there is no health without mental health" underscores the fact that mental health is an integral and essential component of health. In this context NMSH-MP report will play a significant role to understand the current status of mental health as well as status of mental health facilities/ services and delivery mechanism in the state of Madhya Pradesh.

I really hope that State Mental Health Report will provide boost to strengthen the policy initiatives and contribute to the development of action plans and data guided programs for the state.

I congratulate the team of National Mental Survey-Madhya Pradesh for conducting huge task successfully on time which will eventually contribute to strengthen the mental health care services in the state.

Mrs. Gauri Singh, IAS

अखिल भारतीय आयुर्विज्ञान संस्थान, भोपाल (मध्य प्रदेश)
All India Institute of Medical Sciences, Bhopal (Madhya Pradesh)

PROF. (DR.) NITIN M. NAGARKAR
MS (PGI), DNB, MNAMS, FIMSA
DIRECTOR
Professor, Otolaryngology-Head & Neck Surgery

Message

Every seventh adult of the state is suffering from Mental Morbidity. This huge burden of Mental Morbidity is indeed a matter of great concern, reconciliation and health prioritization for policy makers, public health system, Medical colleges, public health experts, and NGOs of the state.

Treatment-gap for all mental health problems is as high as 91% in the state. The Median duration of illness was 132 months and the Median Interval between onset of illness and consultation was one year. More than one third population of state indulge in psychoactive substance use. Tobacco the most common form followed by alcohol intake. Prevalence of Mental and behavioural problems due to psychoactive substance use is three fold higher than the National prevalence. This high prevalence of Mental disorders amalgameted with the Substance use disorders pose serious challenge to the ill equipped and already over stretched mental healthcare system.

State Mental Health Survey, Madhya Pradesh 2015-16 will bring a paradigm shift in the Mental health planning, resource allocation and service delivery of the state. It will not only provide the insight to policy makers about the existing gap in mental health care service delivery, but will also provide the base line information for the subsequent development of mental health services across the state.

The organisation and delivery of comprehensive and integrated mental health services in the state which is socio-culturally as well as politically diverse and economically poor is, indeed a challenging task for policy makers; but necessary. This report will help the policy makers to develop “Mental Health Care Action Plan” for the state with special emphasis on deaddiction and rehabilitation programmes. I am optimistic that this effort will set up tone for coordinated efforts in order to prioritise Mental health, enabling the Mental Health Services in the state to be accessible to every citizen of the state.

Place: Bhopal
Date: 29.03.2017

Prof. (Dr.) Nitin M. Nagarkar
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Contents


शा.प्राथमिक विद्यालय सेवन्या
जन शिक्षा केन्द्र सानई वि.खण्ड चांचौड़ा,जिला-गुना(म.प्र.)
शाला समय
प्रात:10:30 से अपरान्ह 4:30 तक


शा.मा.वि. बरैयाखड़ा
जन शिक्षा केन्द्र शा. हाई स्कूल
सूचना पटल
राष्ट्र गीत
राष्ट्र गान

Acknowledgement

National Mental Health Survey is a first attempt in the state of Madhya Pradesh to estimate prevalence of various mental health problems & its socio-demographic factors, identification of the health care seeking and service utilization patterns of the population and assessing mental health system in Madhya Pradesh amongst a representative population.

NMHS MP 2015-16, State Survey team would like to sincerely acknowledge the support, guidance and cooperation of all the individuals contributed, participated or facilitated activities at different levels in Madhya Pradesh.

- Mrs. Gauri Singh, Principle Secretary, Dept. of Health and Family Welfare, Govt. of MP. Bhopal
- Mr. Faize Ahemad Kidwai, Ex MD, NHM. Govt. of MP. Bhopal.
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- Mr. Neeraj Dube, District Collector, District Khargone.
- Mr. Amit Singh, SP, Khargone.
- Mr. Rajesh Jain, District Collector, District Guna
- Mr. Prem Singh Bisht, SP, Guna
- Mr. J. K. Jain, District Collector, District Chhindwara.
- Dr. R. S. Bhati, District Mental Health Officer, Guna.

Abbreviations

AIIMS	All India Institute of Medical Sciences
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
BMHRC	Bhopal Memorial Hospital & Research Centre
CDB	Community Development Block
CEB	Census Enumeration Block
CFM	Community and Family Medicine
CHC	Community Health Centre
CI	Confidence Interval
CMD	Common Mental Disorders
DALY	Disability Adjusted Life Years
DAS 2.0	Disability and Socio-economic costs 2.0
DBT	Department of Bio Technology
DMHP	District Mental Health Programme
DST	Department of Science and Technology
FDC	Field Data Collector
GAD	Generalized Anxiety Disorder
GTCS	Generalised Tonic-Clonic Seizures
HH	Households
ICC	Intra-cluster Correlation Coefficient
ICD	International Classification of Disorders
ICMR	Indian Council of Medical Research
ICSSR	Indian Council of Social Science Research
MINI 6.0	Mini International Neuropsychiatric Interview 6.0
MNSUD	Mental, Neurological and Substance Use Disorders

MP	Madhya Pradesh
MSRS	Multi-Stage, Stratified, Random Cluster Sampling Technique
NCD	Non Communicable Diseases
NGO	Non-Government Organisation
NHM	National Health Mission
NIMHANS	National Institute of Mental Health and Neurosciences
NKN	National Knowledge Network
NMHP	National Mental Health Programme
NRHM	National Rural Health Mission
NMHS MP	National Mental Health Survey, Madhya Pradesh
NSSO	National Sample Survey Organisation
OCD	Obsessive Compulsive Disorder
OG	Operational Guidelines
PHC	Primary Health Centre
PPS	Probability Proportion to Size
PRIME	Programme for Improving Mental Health Care
PSM	Preventive and Social Medicine Department
PSU	Primary Sampling Unit
PTSD	Post-Traumatic Stress Disorder
SMD	Severe Mental Disorders
SOHAM	Scaling up Opportunities for Healthy and Active Minds
SSU	Secondary Sampling Unit
WHO	World Health Organisation
YLD	Years Lived with Disability

राष्ट्रीय मानसिक स्वास्थ्य सर्वेक्षणः मध्यप्रदेश 2015-16

सारांश

प्रस्तावना

जैसा की पुरातन कहावत है "मानसिक स्वास्थ्य के बिना सम्पूर्ण स्वास्थ्य की कल्पना नही की जा सकती," यह वाक्य इस तथ्य को रेखांकित करता है कि मानसिक स्वास्थ्य संपूर्ण स्वास्थ्य का अभिन्न और आवश्यक घटक है। मानसिक बीमारियों की पहचान तथा उचित निदान में विलंव, कई सामाजिक समस्याओं को जन्म देती है, जो न केवल व्यक्ति की आय और उपार्जन क्षमता को सीमित कर देती है अपितु रोगी को असमाजिकए अपराधिक गतिविधियों तथा घरेलू हिंसा की तरफ भी प्रवृत कर देती है। साथ ही यह रोगी को शराब एवं अन्य मादक पदार्थो के व्यसन की लत की ओर भी अग्रसर करती है। अपेक्षाकृत ये बीमारियाँ दीर्धकालीन अवधि की होने की बजह से रोगी के जीवन की गुणवत्ता को भी प्रभावित करती हैं।

प्रदेश में मानसिक स्वास्थ्य संबंधित सुविधाओं की कमी तथा विषम सामाजिक परिवेश की वजह से अभी भी मानसिक स्वास्थ्य सुविधाएं आम आदमी तक सुगमता से नही पहुँच पा रही हैं अतः प्रदेश में मानसिक बीमारियों से ग्रस्त रोगियों का एक बड़ा वर्ग अभी भी उपलब्ध स्वास्थ्य सुविधाओं का लाभ उठा पाने में असमर्थ है। इसका मुख्य कारण लोगो में जागरूकता की कमी, सुविधाओं का उनकी पहुँच से दूर होना तथा इससे जुड़ी कुछ भ्रांतिया हैं।

पिछले एक दशक में मानसिक बिमारियों को समझने तथा उनका उचित निदान जनमानस तक पहुँचाने हेतु कई गंभीर प्रयास किये गये हैं। ये सारे प्रयास इस दृष्टिकोण से किये गये कि ये समस्या केन्द्रित कम लागत वाले, सामाजिक रूप से स्वीकार्य तथा उनका स्थायी निदान कर पाने में सक्षम हों। साथ ही यह भी ध्यान रखा गया है, कि ये सुविधाएँ आसानी से ग्रामीण एवं दुर्गम इलाकों तक पहुचाई जा सकें। इन प्रयासों की निरंतरता में वर्तमान अध्ययन किया गया जो कि राष्ट्रीय मानसिक स्वास्थ्य सर्वेक्षण का हिस्सा है, जिसके अंतर्गत मध्यप्रदेश सहित बारह राज्यों में यह सर्वेक्षण किया गया। इस सर्वेक्षण का उद्देश्य मानसिक बीमारियों का प्रदेश में फैलाव, उनके कारक, प्रदेश में लोगो के मानसिक स्वास्थ्य संबंधित सुविधाओं की माँग तथा उनकी उपलब्धता का अध्ययन करना है, जिससे कि इससे जुड़ी सुविधाओं और आवश्यक संसाधनों को योजनाबध्द तरीके से सुदृण किया जा सके।

अध्ययन की कार्यप्रणाली

यह अध्ययन मिश्रित विधि द्वारा किया गया, जिसमें की मात्रात्मक एवं गुणात्मक दोनों विधियों का एक साथ प्रयोग किया गया। मात्रात्मक विधि के अंतर्गत मल्टीस्टेज, स्ट्रेटिफाइड, रैन्डम सेम्पलिग (Multi stage Stratified, Random Sampling) तकनीक का इस्तेमाल किया गयाए जिसमें कि परिवार का चुनाव रैन्डम तरीके से किया गया। हर स्तर पर परिवार का चुनाव समूह के आकार के अनुपात (Probability Proportion to Size) के आधार पर किया गया। इसके अनुरूप सर्वेक्षण के लिये प्रदेश के तीन जिले गुना, खरगोन, छिंदवाड़ा तथा शहरी मेट्रो के प्रतिनिधि के तौर पर इन्दौर का चयन किया गया। एक प्रारभिक अध्ययन (Pilot Study) के आधार पर मानसिक बीमारियों का फैलाव 7.5% सुनिश्चित किया गया साथ ही डिजाइन इफैक्ट 3 तथा गैर प्रतिक्रिया दर, (Non Response Rate) 30% सुनिश्चित करने पर Sample Size की गणना की गयी, जोकि 3000 निर्धारित हुई। प्रत्येक Cluster के चयनित परिवारों में सभी 18 वर्ष से ज्यादा उम्र के व्यक्तियों का साक्षात्कार किया गया। हर Cluster में 50 (अपेक्षित व्यक्तियों की संखया) व्यस्क व्यक्तियों का साक्षात्कार किया गया। साक्षात्कार में विभिन्न पहलुओं की जानकारी एकत्रित करने हेतु दस प्रकार की

प्रश्नावलियों को संकलित करके एक समावेशी प्रश्नावली बनाई गयी जिसमें कि मानसिक बीमारियों के लक्षणों को पूछने के लिये छोटी प्रश्नावली (MINI) भी सम्मिलित की गयी। सारे साक्षात्कार प्रशिक्षित दल द्वारा हैंड होल्ड डिवाइस (Hand Hold Devices i.e.; Tablet) के माध्यम से किये गये।

अध्ययन का गुणात्मक भाग Focus Group Discussion (FGD) तथा Key Informant Interview (KII) द्वारा किया गया। हर चयनित जिले में दो FGD (एक रोगी के साथ तथा एक स्वास्थ्य कर्मचारी के साथ) तथा चार KII (एक स्वास्थ्य कर्मचारी, एक सामाजिक कार्यकर्ता, एक गैर सरकारी संगठन का कर्मचारी तथा एक दवा वितरण करने वाले कर्मचारी) के साथ किया गया। ये सभी गुणात्मक साक्षात्कार फील्ड समन्वयक अधिकारियों द्वारा साक्षात्कार गाइड से सम्पन्न किये गये। साक्षातकार द्वारा जानकारी एकत्रित, संकलित तथा हस्तांतरित करने के लिये कठोर नियमों का पालन किया गया जिससे कि जानकारी की एकात्मकता तथा गोपनीयता सुनिश्चित की जा सके।

परिणाम

राष्ट्रीय मानसिक स्वास्थ्य सर्वेक्षण, मध्य प्रदेद्गा रिपोर्ट 2015-16 के अंर्तगत मध्यप्रदेश के तीन जिलों और एक मेट्रो सिटी (इंदौर) से कुल 3240 लोगों से साक्षात्कार के लिये सम्पर्क किया गया । इनमें से 2621 लोगों के साक्षात्कार किये जा सके। इस प्रकार सर्वेक्षण में व्यक्तिगत स्तर पर 81% तथा परिवार स्तर पर 87%लोग अपनी स्वेच्छा से सम्मिलित हुए।

- इस सर्वेक्षण में ज्ञात हुआ कि मानसिक रोगियों का फैलाव (Weighted prevalence) 13.9% था। यदि इसे संखया में परिवर्तित करें तो प्रदेश में करीब 6 मिलियन व्यस्क व्यक्ति मानसिक बिमारियों से प्रभावित हैं। यह फैलाव राष्ट्रीय स्तर के फैलाव से भी ज्यादा है।
- नशीले पदार्थो के सेवन से होने वाले मानसिक रोगों का फैलाव 36.6% पाया गया। जिसमें तम्बाकू युक्त पदार्थो का सेवन 34.1% तथा शराब का सेवन 10%

इस सर्वेक्षण में मानसिक बीमारियों को ICD10 DCR के अनुसार परिभाषित किया गया तथा MINI प्रश्नावली के आधार पर सर्वे किया गया। MINI प्रश्नावली में केवल मानसिक बीमारियों को ही सम्मिलित किया गया, इसमें नशीले पदार्थों के सेवन से होने वाले मानसिक विकार तथा आत्महत्या की घटनाओं को सम्मिलित नहीं किया गया है।

लोगों में पाया गया इन रोगों का फैलाब राष्ट्रीय स्तर के फैलाव से तीन गुना अधिक देखा गया।

- प्रदेश के एक तिहाई लोग किसी ना किसी रूप मे तम्बाकू युक्त पदार्थों का सेवन करते हैं। यह प्रसार 40 वर्ष से ज्यादा के व्यक्तियों पुरूषों तथा ग्रामीण इलाको में ज्यादा पाया गया।
- शराब का सेवन 30 से 49 वर्ष के व्यक्तियों पुरूषों तथा छोटे शहरों के लागों में अधिक पाया गया। आश्चर्यजनक रूप से बड़े शहरों (मेट्रो सिटी) के लोगो में यह ग्रामीण तथा छोटे शहरो की तुलना में कम पाया गया।
- प्रदेश में आत्महत्या की दर प्रति एक लाख व्यक्तियों में 11.9 पाई गई। यह दर पुरूषों में और 18 से 49 वर्ष के व्यक्तियों में अधिक पाई गई।
- प्रदेश के 0.8% लोगों में आत्महत्या करने की संभावना पाई गई, यह संख्या तुल्नात्मक रूप से राष्ट्रीय दर की अपेक्षा ज्यादा है। आत्महत्या करने की संभावना 30 से 49 वर्ष के व्यक्तियों, पुरूषों तथा मेट्रो शहरों में रहने वाले लोगों में अधिक पाई गई जो कि राष्ट्रीय सर्वेक्षण के परिणामों से मेल खाती है।
- प्रदेश मे 13.9% व्यक्ति किसी न किसी मानसिक बिमारी से ग्रस्त पाये गये, जिनमें 13.5% लोग सामान्य मानसिक बिमारियों से तथा 0.39% गंभीर मानसिक बिमारियों से ग्रस्त पाये गये।

- वर्तमान समय में मानसिक बिमारी से ग्रस्त रोगियों के अनुसार इस बिमारी की वजह से उनकी सर्वाधिक अक्षमता पारिवारिक जीवन (Famliy Life) में देखा गया। आश्चर्यजनक रूप से उन्होनें अपनी अक्षमता सबसे कम अपने कार्य जीवन (Work life) में बताया।
- व्यापक रूप से प्रदेश के 91% मानसिक रोग से ग्रस्त मरीजों को चिकित्सा सुविधायें नहीं मिल सकीं। औसतन (Median) मानसिक रोगी 132 महीनो से बीमार थे, तथा प्रत्येक मरीज के लक्षण आने से इलाज शुरू करने में एक वर्ष का समय लगा।
- प्रदेश में हर 1,00,000 की जनसंख्या के लिये अस्पताल आधारित मानसिक स्वास्थ्य सुविधायें केवल 0.03% लोगो के लिये ही उपलब्ध है। इतनी ही जनसंख्या के लिये अस्पताल में उपलब्ध बिस्तरों की संख्या केवल 1.18 है।
- विगत वर्षो में प्रदेश के केवल 99 स्वास्थ्य कर्मियों का ही मानसिक स्वास्थ्य से संबंधित प्रशिक्षण हुआ है। (0.1/1,00,000 जनसंखया) साथ ही हर 1,00,000 की जनसंखया के लिये केवल 0.2 मानसिक स्वास्थ्य कर्मचारी तथा 0.05 मानसिक रोग विशेषज्ञ उपलब्ध हैं।

प्रदेश में अवसाद (Depression) का प्रसार 1.4% पाया गया यदि इसे संख्या में परिवर्तित करें तो यह लगभग 6.1 लाख होती है जोकि चौंका देने वाला आँकडा लगता है। अवसाद का प्रसार 40 वर्ष से अधिक के व्यक्तियों में, महिलाओं में तथा शहरी मेट्रो के निवासियों में सर्वाधिक पाया गया।

- सम्पूर्ण प्रदेश में पुर्नवास संबंधित कार्यो के लिये विशेषज्ञ कर्मचारियों तथा इन रोगों के संबंधित विशेषज्ञ शिक्षकों का पूर्णतः अभाव है।
- प्रदेश की मानसिक स्वास्थ्य व्यवस्था/प्रणाली मूल्याकंन के अंर्तगत एक मानसिक स्वास्थ्य समन्वय तंत्र में (State Mental Health Co-ordination Mechanism) तथा मानसिक रोगों के दवाईयों की उपलब्ध्ता में मध्यप्रदेश ने 10 में से 7 अंक अर्जित किये। हॉलाकि व्यापक रूप से Mental Health Score Card के 10 मानकों के आधार पर प्रदेश ने 100 में से केवल 31 अंक अर्जित किये जो कि राष्ट्रीय औसत से कम है।

प्रदेश के लिये सर्वेक्षण का महत्व

प्रदेश में मानसिक बिमारियों का इतने व्यापक पैमाने पर प्रसार साथ ही नशीलें पदार्थो के व्यसन की समस्या प्रदेश के लिये गंभीर चुनौती है तथा यह तथ्य इस बात को भी इंगित करता है कि इस क्षेत्र में और भी तेजी से कार्य करने की आवश्यकता है। यह समस्या पहले से ही संसाधनों की कमी तथा अन्य समस्याओं से घिरी प्रदेश की सार्वजनिक स्वास्थ्य प्रणाली को गंभीर चुनौती देती हुई दिखाई देती हैं। संभवतः यह प्रदेश सरकार के लिये उचित समय है जब प्रदेश के मानसिक स्वास्थ्य एंव व्यसन मुक्ति के लिये समावेशित, अखांडित (Unfractured) तथा एकीकृत वस्तु क्रियाओं का उचित विस्तार करने की दिशा में गंभीर प्रयत्न किये जायें।

- हम उम्मीद करते हैं, कि ये रिर्पोट प्रदेश की मानसिक स्वास्थ्य सुविधाओं को बेहतर बनाने के क्रम में मील का पत्थर साबित होगी। हम यह भी उम्मीद करते हैं कि यह रिर्पोट प्रदेश स्तरीय मानसिक स्वास्थ्य कार्ययोजना (State Mental Health Action Plan) बनाने में महत्वपुर्ण भूमिका निभायेगी, जिससे कि संबंधित सभी हित धारकों जैसे कि राजनेताओं, स्वास्थ्य से जुड़े नीतिनिर्धारकों, संबंधित दूसरे क्षेत्रों के विशेषज्ञ तथा प्रिंट और विजुअल मीडिया के समन्वित प्रयासों को इस कार्ययोजनो को समावेशित किया जा सके।

यह प्रयास प्रदेश में व्याप्त मानसिक रोग की विकराल समस्या को समझने तथा स्वीकार करने में मदद करेगा। जिससे कि भविष्य में इसके लिये मानसिक स्वास्थ्य सुंविधाओं को

उन्नत तथा एकीकृत करने के गंभीर प्रयास किये जा सके। ये सुविधायें केवल निदान और उपचार तक ही सीमित नहीं होनी चाहिये, अपितु नीतिगत रूप से मरीजों के उचित सामाजिक, आर्थिक तथा कल्याणकारी पुर्नवास योजनाओं पर आधारित होनी चाहिये। प्रदेश सरकार द्वारा उपरोक्त वस्तुस्थिति को समझते हुए प्रदेश के हर जिला अस्पताल में मनकक्ष की शुरूआत की गयी है, जो कि मानसिक स्वास्थ्य सुविधाओं को जन मानस तक पहुॅचाने की दिशा में सकारात्मक कदम है।

EXECUTIVE SUMMARY

Introduction

The maxim, "There is no health without mental health" underlines the fact that mental health is an integral and essential component of health. Mental disorders going unrecognized or inappropriately managed predispose to a wide range of social and societal problems. Some conditions are implicated not only in lowering productivity and earning potential, but also in a number of antisocial behaviors, crime, homelessness, domestic violence, alcohol and drug use . It is of chronic nature thus, resulting in lifelong impact. This impact lasts for a protracted period gradually resulting in poor quality of life for such individuals and their families.

Unavailability and inaccessibility of mental health care services, compounded by the diverse and complex sociocultural factors appear to influence the mental health seeking behaviour of the population in the state. A large proportion of patients with mental disorders do not seek health care due to lack of awareness about treatment services, distance of the health care setup from their residence, and the stigma associated with treatment.

Since last past decade, there have been multiple endeavours towards understanding the mental health problems and developing a problem oriented, cost effective, socially acceptable mental health care delivery systems especially in rural areas focussed on sustainable systems. In continuation of the same, the present study, which is a part of the National Mental Health Survey 2015-16, was undertaken in 12 states of country including Madhya Pradesh. The objective of present study was to estimate the prevalence of priority mental health disorders, estimate treatment gap, assess service utilization, disability and socio-economic impact along with assessment of resources and systems.

Methods

The mixed-method study design was used; wherein both quantitative and qualitative studies were done simultaneously. Prevalence of mental health morbidity was found to be 7.5% according tothe pilot study; estimated design effect was 3; and expected non-response rate among the surveyed population was 30%. Based on these sample size calculated was 3000. The sampling methodology used for quantitative part was a multistage, stratified, random sampling technique, with random selection based on Probability Proportionate to Size (PPS) at each stage. Three rural districts i.e.; Guna, Khargone, Chhindwara and the urbanmetro population of Indore were

selected. Then clusters (village in rural area and Census Enumeration Block in urban area) were selected by PPS method. All individuals, 18 years and above in the selected households were interviewed till the desired sample (50 in each cluster) is achieved. A set of 10 instruments including Mini International Neuropsychiatric Interview (M.I.N.I. 6.0) were utilised for data collection. Data was collected by trained data collection team through hand held devices.

For qualitative part, two Focus Group Discussions [FGDs] (One each with patients and health care providers) & four Key Informant Interviews [KIIs] (one each with Health Care Provider, social worker, health care provider from NGO and Pharmacist) were conducted. All the KIIs and FGDs were done through an Interview guide.

Any Mental morbidity was defined as those disorders as per ICD10 DCR and captured by MINI instrument. This represents the mental disorder morbidity including substance use disorders but excluding suicidality.

In addition to defining disorders as per the ICD-10 DCR, the prevalence was classified based on the presence of disorders as per the current time period (point prevalence) or at any time in the life of an individual (life time prevalence) as determined by the MINI.

Strict protocols were established for data collection, compilation and transfer with access controlled mechanisms.

Result

During State Mental Health Survey (NMHS MP 2015-16) 2015-16, a total of 3,240 individuals across 3 districts and one urban metro city were contacted. Among them, 2,621 were interviewed. The response rate was 80.9% at individual level and 87.3% at household level.

The prevalence of Depression in state was 1.4 %. If we translate it into absolute numbers, it turns out to be staggering 6.1 lakh persons. It was found that those more than 50 years, females and resident of urban metro had highest burden of depression.

- Overall, the weighted prevalence of Mental Morbidity in adults was 13.9% (95% Confidence Interval 13.7-14.1), This prevalence is higher than the national prevalence of mental morbidity.
- Accordingly, an estimated 66 million adults are in need of mental health care services in the state of Madhya Pradesh.
- The burden of any psychoactive substance use was 36.6%, with tobacco use disorder being 34.9% and alcohol use disorder being 10.3%. The prevalence of psychoactive substance use is three fold higher than the national prevalence.
- More than one third population in the state

is indulging in tobacco use. The prevalence was highest among persons with age more than 40 years, male and resident of rural areas.

- The alcohol use disorder was found higher in population between 30 to 49 years, amongst males and those resident of urban, non-metro areas. Surprisingly, it was least in people living in urban metro city.
- The incidence rate of suicide was 11.9 per 1,00,000 and was higher among males and amongst persons from economically productive age group i.e; 18 to 45 years.
- The suicide risk in state was 0.8% which was comparable with the national rate and it was found higher among age group 30 to 49 years, males and people living in urban metros which coincides with the national findings.
- The self-reported disability among respondents with current mental illness was highest for family life (34%). Surprisingly they reported least disability in their work life (27%) .
- Overall, for all mental health problems treatment gap (not consulting health provider despite of having mental health problem) is as high as 91% in the state.
- The median duration of illness was found to be 132 months and the median interval between onset of illness and consultation was found to be one year.
- There are only 2 public mental hospitals and 14 medical colleges to provide mental health care in the state.
- The health care professionals who had undergone training in mental health in last three years are 99 (i.e. 0.1 per lakh population).
- The number of mental health professionals in the state was 0.2 per one lakh population. However, the proportion of psychiatrist was 0.05 per lakh population.
- There were no rehabilitation workers or special education teachers available under the public healthspectrum.
- The Lifetime and Current Prevalence of important Mental morbidities of state are summarized in Table 1.

Table 1: Weighted Prevalence (in %) of Mental morbidity as per ICD-10 DCR among adults 18+ years (n=2621)

ICD*-10 DCR#	Lifetime (95% CI*#)	Current (95% CI)
Any mental morbidity	16.7 (16.53-16.86)	13.9 (13.74-14.05)
F10-F19-Mental and behavioural problems due to psychoactive substance use	36.57 (36.36-36.78)	
F10 Alcohol use disorder	10.33 (10.19-10.46)	
F11-F19, except F17 Other substance use disorder	0.57 (0.53-0.6)	
F17 Tobacco use disorders	34.89 (34.68-35.1)	
F20-F29 Schizophrenia and other psychotic disorder	0.89 (0.85-0.93)	0.34 (0.32-0.37)
F30-39 Mood (Affective) Disorders	4.51 (4.42-4.6)	1.41 (1.36-1.46)
F30-31 Bipolar Affective Disorders	0.36 (0.33-0.39)	0.06 (0.05-0.07)
F32-33 Depressive Disorder	4.18 (4.1-4.27)	1.39 (1.33-1.44)
F40-F48 Neurotic and stress related disorders	2.32 (2.25-2.39)	2.1 (2.04-2.16)
F40 Phobic anxiety disorders	1.4 (1.35-1.45)	
F40.0 Agoraphobia	1.02 (0.97-1.06)	
F40.1 Social Phobia	0.59 (0.56-0.63)	
F41 Other Anxiety disorder	0.64 (0.6-0.67)	0.42 (0.39-0.45)
F41.0 Panic disorder	0.33 (0.31-0.36)	0.11 (0.1-0.13)
F 41.1 Generalized Anxiety Disorder	0.15 (0.13-0.17)	
F41.9 Panic disorder with limited symptoms	0.16 (0.14-0.18)	
F42 Obsessive Compulsive Disorder	0.40 (0.37-0.43)	
F42.0 to 42.8 OCD current	0.19 (0.17-0.20)	
F42.9 OCD NOS##	0.40 (0.37-0.43)	
F43 Reaction to severe stress and adjustment disorders (PTSD**)	0.20 (0.15-0.24)	
ICD- International Classification of Disorders#CI-Confidence Interval#DCR-Diagnostic Criteria for Research**PTSD-Post Traumatic Stress DisorderOCD NOS##-Obsessive Compulsive Disorder, Not Otherwise Specified		

Implication

The high prevalence of mental morbidities and substance use disorder in state illustrate the burden they pose, the challenges lying ahead and the sheer magnitude of the work that need to be accomplished. In combination, they pose a serious challenge to the already over-stretched health care system of state. Considering this we feel that, this is the high time for the state to develop comprehensive, un-fractured and integrated mental health services, with a greater focus on substance use disorders.

The optimism that this report will generate a tectonic shift in the development of Mental Health Services in the state is indeed very high. It is expected to help develop the "Mental Health Care Action Plan" for the state and set the tone for coordinated efforts involving various stake holders like: political leadership, policy makers in health, civil society and related sectors, professionals from various disciplines - the print and visual media and all those involved in mental health care.

The report is also expected to enable the society to acknowledge the huge burden of mental disorders in state, assist to make strong attempts to intensify and scale-up mental health care services, integrate mental health promotion into mainstream national programs and also strengthen the rehabilitation aspect of mental health through policies and programmes in a multi-dimensional approach.

The recent acknowledgements and initiative in this regard like "Mann Kaksh" is indeed a positive leap towards the right direction from state government.

Few encouraging steps taken by the Madhya Pradesh state in an order to meet the Mental Health Care need of citizens;

- **The state has inaugurated the "Mann Kaksh" or the mental health cell in approximately every district hospital, in a bid to integrate mental health into routine primary health care. This initiative was termed SOHAM (Scaling up Opportunities for Healthy and Active Minds).**
- **Madhya Pradesh Government has set up 'Anand' Department which will coordinate among other departments and draft polices that would increase the level of happiness among its citizens.**
- **Among indicators of State Mental Health System Assessment (NMHS MP 2015-16A), the score of state was 7 out of 10 in State Mental Health Co-Ordination Mechanism and availability of drugs.**
- **Recent efforts to partial and phased alcohol ban i.e Recently state Govt. has decided, thataAlcohol prohibition will be implemented in the entire state by closing all liquor shops in a phased manner.**

INTRODUCTION

Health is pivotal for the growth, development and productivity of a society and is vital for a happy and healthy life. The maxim, "there is no health without mental health" underlines the fact that mental health is an integral and essential component of health. It is influenced by a complex interaction of biological, social, environmental, cultural and economic factors; the imbalance of these determinants may lead to mental disorders, which affect everyone, irrespective of age, gender, residence and living standards. Some conditions are implicated not only in lowering productivity and earning potential, but also in a number of antisocial behaviors, crime, homelessness, domestic violence, alcohol and drug use . It is of chronic nature and may result in lifelong impact. This impact lasts for a protracted period, gradually resulting in poor quality of life for such individuals and their families.

The health of people in India is changing due to socio-demographic and epidemiological transition. In this emerging scenario, mental, neurological and substance use disorders (MNSUDs), included under the broader rubric of NCDs are well acknowledged as major public health problems with a greater share of morbidity and disability. MNSUDs include wide range of conditions and they have varied presentations that range from subclinical/ chronic conditions to emergencies/acute conditions. Some of them have remissions and relapses. They often go unrecognised due to neglect by patients, lack of objective measurement criteria and deficient services.

Countries around the world are working towards developing the required (both independent as well as integrated) services for their populations. In fact, India was one among the first to develop a National Mental Health Programme in the early eighties with a focus on accessible and equitable mental health care.

Mental disorders are important

- Mental disorders contribute to a significant load of morbidity and disability, even though few conditions account for an increasing mortality. As per Global Burden of Disease report, mental disorders accounts for 13% of total DALYs lost with depression being the leading cause.[1] Previous reviews, meta-analysis, studies and independent reports have indicated that nearly 100 million persons in India are in need of systematic care.But, this could not be relied as the data was few decades old and the methodologies had serious limitations.
- Conditions related to the brain and minds are acknowledged to be on the raising trend in recent times. This is probably due to the growing awareness in society, improved recognition, variations in disease patterns, changing lifestyles and biological

vulnerabilities. Consequently, depression, anxiety, alcohol use, suicidal behaviors, drug use, sleep disorders and several others are on the increase.[2]

- Mental disorders affect everyone, irrespective of age, gender, residence and living standards, even though some groups are at a higher risk for certain illnesses; only the impact varies. For example, mental disorders among children, depression among pregnant mothers, and dementia among the elderly are well known.
- Growing evidence from research has demonstrated the close association of mental disorders as precursors / risk factors/ co-morbid conditions / consequences of a wide range of acute and chronic conditions like Non-Communicable Diseases.[3,4], injury and violence, maternal and child health conditions. For example, depression and cancer are known to coexist, while anxiety disorders are linked to the occurrence of cardiovascular disorders. [5] Non-recognition of associated mental health problems often leads to delayed recognition and challenge recovery.
- Mental disorders are known to be caused by a complex interaction of biological, social, environmental, cultural and economic factors.[2] In countries like India, the social determinants of health like employment, education, living standards, environment, access, equity and others contribute significantly to both causation and recovery. Poverty, low living standards and related factors are implicated in the increased occurrence, but they also vitiate the cycle of poverty and impoverishment.[6]
- Persons with mental disorders are prone for wide range of social and societal problems if their illness goes unrecognized or inappropriately managed. Some mental health conditions are implicated not only in lowering productivity and earning potential, but also in a number of antisocial behaviors, crime, homelessness, domestic violence, alcohol and drug use . Undoubtedly, mental health care is an important issue to be addressed.
- From a cultural perspective, mental disorders are associated with considerable amount of stigma in Indian society, leading to neglect and marginalization. Such individuals and their families face numerous challenges in daily life, both for managing the condition as well as for making them productive due to prevailing attitudes, media portrayals, societal discrimination and deprived opportunities.
- From an economic angle, the impact of MNSUDs is acknowledged to be high due to their nature, duration, and impact of illness affecting growth, productivity and the earning potentials of individuals.
- Persons with mental illness are unable to receive quality care due to limited awareness, availability, accessibility and affordability; the increasing costs of care exert a prohibitive effect.
- Significantly, persons with mental

disorders account for nearly a fourth of the total case load in primary care settings highlighting the burden at peripheral levels. Most often, these individuals present as common mental health problems or as a comorbid condition of other disorders and are missed or inappropriately managed.

- An alarming fact which has been recognized for several years, is the huge gap, often referred to as the treatment gap, in the care of the mentally ill in Indian society.[7] This is due to the poor awareness among people and the availability of limited resources.

With the recognition of the above factors, efforts are ongoing to strengthen, integrate and scale up activities to develop comprehensive and integrated services. India was one of the first countries to make a pledge to promote the mental health of its people. This was done through its National Mental Health Programme initiated in the later 1980s. However, mental health has often been accorded a lower priority amidst competing health and social priorities; hence, the progress has been far from satisfactory.[8] Apart from several reasons that have been put forth for this, a systems approach and public health components in mental health delivery are often found missing.

Ministry of Health and Family Welfare, Government of Madhya Pradesh is committed for strengthening delivery of mental health services as one of the high priority area. The state is one of the first states in India to organise a state level mental health policy and planning workshop in March 2015 under the aegis of National Health Mission and took a visionary decision to scale up mental health services across all districts, moving beyond DMHP and establishing "Mann Kaksh" at all 51 district hospital facilities covering a population of around 75 million. This initiative was termed as SOHAM (Scaling up Opportunities for Healthy and Active Minds). By the end of month of September, thirty out of fifty one districts in Madhya Pradesh have inaugurated the "Mann Kaksh" or the mental health cell in their district hospitals, in a bid to integrate mental health into routine primary health care. Madhya Pradesh is also first state to start Happiness Department (Anand Vibhag) and established a state level institute to execute various programs.

Mental health problems in Madhya Pradesh

Mental health issues are often last on the list of priorities in a state where mortality is mostly the result of infectious diseases and malnutrition. Morbidity and mortality from mental illness receive very little attention from the policy makers, though anecdotal experience seems to suggest that mental illness burden in the state is not low.[9]

Unavailability, inaccessibility of mental health care resources amalgamated by the diverse and complex sociocultural factors appears to influence the mental health seeking behaviour of the population in the state.[10] A large

proportion of psychiatric patients do not seek health care due to a lack of awareness about treatment services, the distance of health care centre from their residence, and the stigma associated with treatment. Studies from various parts of states suggested vide range of MNSUDs; Bipolar Affective Disorders, Schizophrenia, Depression, Psychosis and Generalized Anxiety Disorder at very high prevalence. Young age, female gender, resident of rural area, Illiteracy and long distance from health centrewere found to be important determinants. [11, 12] The large treatment gap for mental disorders underlines the need for integration of mental health in primary care. It has been reported that there are number of challenges to integrate mental health into primary care, which can be addressed through the injection of new resources and collaborative care models.[13]

The mental disability in state was reported by Census 2001 was 39,513 and contributed to 2.5% of total disability, however neither census nor National Health profile reported various domains of the mental health disorders.[14]

In the last decade, there have been few efforts to understand the mental health problems and to develop a problem oriented, cost effective, socially acceptable mental health care delivery system especially in rural areas in an order to develop a sustainable system. One of its kind was "Theory of Change" (ToC) approach that has been used to develop and evaluate complex health initiatives in a participatory way in middle income countries including India. The Programme for Improving Mental Health Care (PRIME) is a multi-country research programme which aims to provide evidence for how to integrate mental health into primary care by developing, implementing and evaluating district level mental health care plans (MHCPs) for priority disorders. [15] ToC workshops (2014) were found very useful approach for developing mental health care plans because they facilitate logical, evidence based and contextualised plans, while promoting stakeholder buy in.[16]

Stakeholder analysis of PRIME has identified policy makers, donors, mental health specialists, the media (national and district) and universities as the most powerful, and most supportive actors for scaling up mental health care. Force field analysis provided a means of evaluating stakeholder power and positions, particularly for prioritising potential stakeholder engagement in the programme in decentralized manner.[17]

Scope and Objectives of National Mental Health Survey

The National Mental Health Survey (NMHS) adopted a pragmatic approach to address the triple issues of estimating the burden of mental health problems in a state representative population, understanding health care seeking patterns and identifying the current status of human resources and services, thus providing a framework for developing and strengthening national and

state mental health programmes. Keeping the traditional approach of including epilepsy and substance use disorders under the broader concerns of mental health, the survey addressed mental health problems, as a common group of Mental, Neurological and Substance use (MNS) disorders. At the state level, survey was undertaken with the following objectives:

I. Estimate the prevalence and pattern of various mental disorders in a representative population of Madhya Pradesh
II. Identify treatment gap, health care utilization, disabilities and impact
III. Assess the current mental health care resources and facilities in the state for planning and strengthening of resources and services.

Project Management

Implementing a state level survey requires a strong coordinated frame work and a network of professionals and administrators for implementing several activities in timely manner. Hence a robust mechanism was established to develop, guide, supervise and coordinate all activities being implemented by the core team. Multi-disciplinary teams with a right mix of experience and expertise were identified and brought together to achieve the stated objectives of NMHS MP 2015-16.[18] The Department of Community and Family Medicine, All India Institute of Medical Sciences (AIIMS) Bhopal was entrusted with the responsibility of nodal agency; coordination of the state survey, data collection, monitoring, supervision, reporting, creation and dissemination of state level report. This work was done in collaboration with Psychiatry department of Bhopal Memorial Hospital and Research Centre (BMHRC, an institute of Department of Health Research, MoHFW, GoI), Bhopal.

METHODOLOGY

This State Mental Health Survey Madhya Pradesh was part of NMHS 2015-16;the latter was undertaken as a large scale, multi-centered national study on the various dimensions and characteristics of mental health problems among individuals aged 18 years and above across 12 Indian states.

A Master Protocol outlining the study components was developed by NIMHANS to provide the overall guiding framework for conducting the study. A companion Operational Guidelines (OG) document (developed separately for the survey and for the mental health systems assessment) provided a step-by-step guide to the activities specified in the Master Protocol, ensuring that the survey was uniformly conducted across all the states.

Study sites

National Mental Health Survey was initiated in 12 states of India including Madhya Pradesh. Preference to Madhya Pradesh state in Central region have been based on availability of a comprehensive team which includes (i) a Psychiatrist from Bhopal Memorial Hospital & Research Centre (BMHRC), (ii) Public Health / Community Medicine person from AIIMS Bhopal and ability of the local team to mentor / conduct the survey in the state, and (iii) availability of MINI local language version.

Phase1: Quantitative Part

Sample size estimation for survey amongst adults:

The sample size estimation for NMHS was done by using results of pilot study conducted by NIMHANS in Kolar district of Karnataka. Representative sample size for each state was calculated. The prevalence of any mental health morbidity among adults was 7.5% in the pilot study and the sample size required for a simple random sampling with confidence level of 95% and absolute error of 2% was 666.However such large studies could be logistically implemented with multi-stage cluster sampling, therefore final sample size was derived by using design effect and non-response rate. The design effect was estimated to be 3 for the given ICC value of 0.05. Thus, (666*3=) 1,998 or about 2,000 adults need to be interviewed. To obtain the final sample size, a 30% non-response (2000/0.70= 2857) was included. Thus, in each study site 50 adults >18 years are to be interviewed in each cluster and in all 60 clusters were to be surveyed, providing a total of (50 x 60) 3000 respondents.

Sampling design

The overall study design adopted was multi-stage, stratified (3 districts out of 50, then 2

blocks from within each district), random cluster sampling technique, with random selection based on Probability Proportional to Size at each stage (MSRS-PPS). Each named inhabited village as per Census 2011 constituted a rural cluster while a Census Enumeration Block served as urban cluster in urban areas of selected district and metro city.

The districts (selected using stratified random sampling technique (based on district level poverty estimates)and talukas within the states constituted the Primary and Secondary Sampling Units, respectively, and individuals within the identified households formed the unit of analysis.Only non-institutionalised individuals were considered.

Selection of Districts, Talukas / CDB and Clusters:

1. A four stage sampling was adopted (District > CDB /Taluka> Village / Ward^ CEB > HH) in state. (Table 2 & Figure 3)
2. As there is increasing evidence that socioeconomic status and poverty issues are closely related to mental illnesses, district level poverty estimates was adopted to stratify the districts within the state. The district wise poverty estimates were computed based on the data from National Sample Survey 68th round (2011-12) consumer expenditure data using the Tendulkar's committee methodology of calculating poverty line. All the districts were trifurcated and one district was randomly selected within each strata (From Upper Chhindwara; from middle: Khargone; from lower Guna & Indore) using the PPS strategy.
3. A total of two CDBs / Talukas were selected randomly within each identified district using the PPS strategy.(Table 2)
4. Selection of Urban and Rural clusters within the selected CDB/ talukas was made in such a way that they were proportional to the state urban-rural proportions using the PPS strategy. Each urban cluster was further stratified as Urban metro areas and Urban non-metro areas as per 2011 census.

a. Rural Clusters

Villages with population >500 comprising atleast 1 CEB were listed and requisite number of villages were selected randomly. If very large villages (5 to 10,000 population) got selected, one or more CEBs within the village was randomly selected to achieve the requisite sample size.

b. Urban Clusters

i. **Non-metro Clusters:** The Urban wards within the headquarters of randomly selected talukas constituted the urban non-metro clusters. If the selected taluka headquarters was a metro as per census 2011 another urban area within the same taluka was randomly selected for the urban non-metro sample.

ii. **Metro Clusters:** Proportionate number of clusters was selected from at least one urban metro area within state. If the Urban metro is within the randomly identified taluka, the same was selected. If there was no urban metro within the taluka, the urban metro within the district was selected. If within the district there was no urban metro city, the nearest urban metro to the one or more of the district being surveyed was selected and the requisite number of clusters selected.

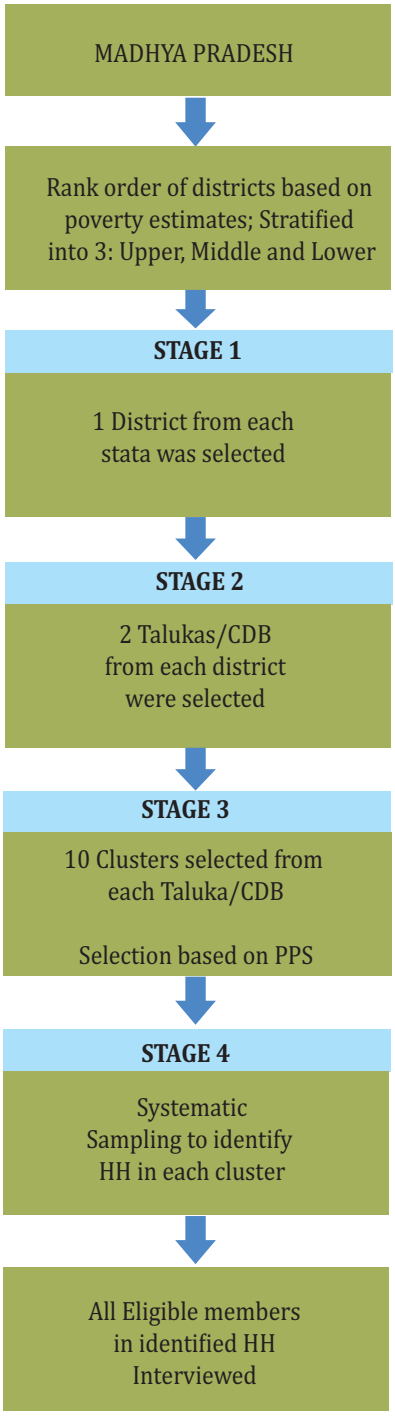
iii. In each of the urban areas (both metro and non-metro areas), one or more CEBs within the ward was chosen using simple random method to achieve the requisite sample size.

5. Relatively stable populations and non-commercial areas /localities were preferred. Uninhabited houses and commercial establishments were specifically excluded.(Table 2)

Selection of individuals

After enlisting all resident members of the household (HH), all eligible members above the cut-off age of 18 years in the HH were interviewed after taking consent. In case an individual member is not available, two more visits were planned: first visit on a holiday and the second one with a prior appointment. If after the third visit, the individual was not available, then he/she was declared as a non-responder. Written informed consent from the responsible respondent and each of the adult members consenting for the survey interview were obtained.(Table 2 Fig. 1)

Figure1:Overview of the study design in NMHS Madhya Pradesh State 2015-16



Footnote : CDB: Community development block, PPS: Probability proportion to size, HH: House hold

Table2: Selected districts, Talukas/CDBs, villages/wards of urban areas under NMHS, MP 2015-16

District	Blocks	Rural	Urban Non Metro
Guna	Kumbhraj	TulyaKhedi, Nijampur, Sevanya, KenkdiViran, Kudara, Badagaon, Sanai	Kumbhraj (NP) WARD NO.-0004, Kumbhraj (NP) WARD NO.-0015
	Raghogarh	Raghupur, Nauhar, Kishanganj Alias Motipur, Khiriya, Kakwasa, Aamliyawada, Ram Nagar	Raghogarh -Vijaypur (M) WARD NO.-0004, Raghogarh -Vijaypur (M) WARD NO.-0015
Khargone	Bhikangaon	Ghoghnath, Lalni, Pachhaya, Jamnya Buzurg, Rodiya, Banjhar, BilkhedKhurd	Bhikangaon (NP) WARD NO.-0012, Bhikangaon (NP) WARD NO.-0006
	Khargone	Mothapura, Raibid, Bhasner, Ghegaon, Ghotya, Dongarchichli, Barud	Kajalpur (OG) WARD NO.-0039 (Rural MDDS CODE:477629), Khargone (M) WARD NO.-0028
Chhindwara	Umreth	Karla Khurd, Munga, Satnoor, Musadei, Kanhargaon, Bijori Gumai, Umreth	
	Sausar	Gajandoh F.V., Maherakhapa, Amla F.V., Utekata, Saykheda, Ghoti, Pandhara Khedi	Piplanarayanwar (NP) WARD NO.-0013 , Sausar (M) WARD NO.-0008, Mohgaon (NP) WARD NO.-0006, Borgaon (CT) WARD NO.-0001
Metro District-	**Taluka**	**Rural**	**Urban Metro**
Indore	Indore		Indore (M Corp.) WARD NO.-0013, Indore (M Corp.) WARD NO.-0020, Indore (M Corp.) WARD NO.-0027, Indore (M Corp.) WARD NO.-0033, Indore (M Corp.) WARD NO.-0040, Indore (M Corp.) WARD NO.-0042

Footnote : NP - Nagar Palika, M:Muncipality, M Corp: Muncipal Corporation

Study Instruments

The study instruments included following sections; Socio-demographic form, Mini International Neuro-psychiatric Inventory (MINI) 6.0, Intellectual Disability screening, Epilepsy related questions to obtain probable diagnosis of Generalised Tonic Clonic Seizures, Tobacco use questions, Health treatment and care and Socio-economic impact.

Questions to identify Persons with Epilepsy were identified by the questionnaire algorithm for identifying cases of Generalised Tonic-Clonic Seizures (GTCS) in the community [19], Tobacco assessment was done through Fagerström Nicotine Dependence Scale [20], Pathways Interview Schedule (Encounter Form) developed by the WHO [21] to gather systematic information about the sources of care used by patients before seeing a mental health professional was used to assess health care seeking behaviour and the questions related to Disability and socio-economic costs derived from WHO -DAS 2.0.[22]

Box1: Definitions used in NMHS MP 2015-16

1. **Any Mental morbidity was defined as those disorders as per ICD10 DCR and captured by MINI instrument. This represents the mental disorder morbidity including substance use disorders but excluding suicidality.**
2. **In addition to defining disorders as per the ICD-10 DCR, the prevalence was classified based on the presence of disorders as per the current time period (point prevalence) or at any time in the life of an individual (life time prevalence) as determined by the MINI.**
3. **The MINI diagnostic algorithm for DSM IV diagnosis is equivalent to the ICD-10 DCR criterion in most of the disorders, with two exceptions:**

a. **In diagnosis of depressive disorders, the MINI and DSM IV TR takes into account the item of dysfunction, while in the ICD-10 DCR, only number of symptoms are taken into consideration. Hence 4 or more symptoms were used to indicate a depressive episode as per the ICD 10 DCR criteria regardless of the item of dysfunction.**

b. **Alcohol and other substance use disorders included dependence, abuse and harmful use as detailed in the ICD 10 DCR. The DSM IV dependence criteria is equal to the ICD-10 DCR criteria for dependence. For harmful use, as per the ICD 10 DCR, the criterion of DSM IV abuse and in addition substance use and its impact on**

physical and social areas was considered for ICD 10 DCR Harmful use.

4. **Substance use disorders include tobacco use (low to significant dependence), alcohol use disorders and other substance use disorders.**
5. **The Fagerström instrument for tobacco dependence was modified to include non-smoking variety of tobacco use and the same was adopted with similar scoring system.**
6. **Due to the complexities in documenting observations related to psychotic behaviours in an epidemiological community based study, MINI captures Schizophrenia and other psychotic disorders as a group and not as individual categories. The same as per the ICD 10 DCR criteria has been adopted.**
7. **Suicidal risk was categorised as low (score 1-8), moderate (score 9-16) and high risk (score >17) based on the scoring obtained in the MINI schedule.**
8. **Common mental disorders include depressive disorders (mild, moderate and severe without psychotic features), neurotic and stress related disorders and alcohol and other substance use disorders.**
9. **Severe mental disorders include Schizophrenia and other psychotic disorders, bipolar affective disorders, and severe depression with psychotic features.**

Training of Study Team

- All efforts were made to recruit field workers who have experience of working in mental health field and undertaking door to door survey. Acomprehensive training programme was organize at two levels; At the first level, Training of Trainers is held by NIMHANS team and at the second level, individual NMHS MP 2015-16 were trained by the NIMHANS team for NMHS methodology and administration of MINI and other questionnaires
- The AIIMS Bhopal team in collaboration with NIMHANS team conducted a detailed training for the field survey staff for a period of 6 weeks. This training was done at Bhopal at the beginning of the survey and continued till completion at periodical intervals. It ensured that field workers had first-hand experience of (a) interviewing real patients in clinical settings, (b) administering MINI and other NMHS instruments on such patients to attain an acceptable degree of proficiency.
- As NIMHANS team was continuously working with the state team and periodic

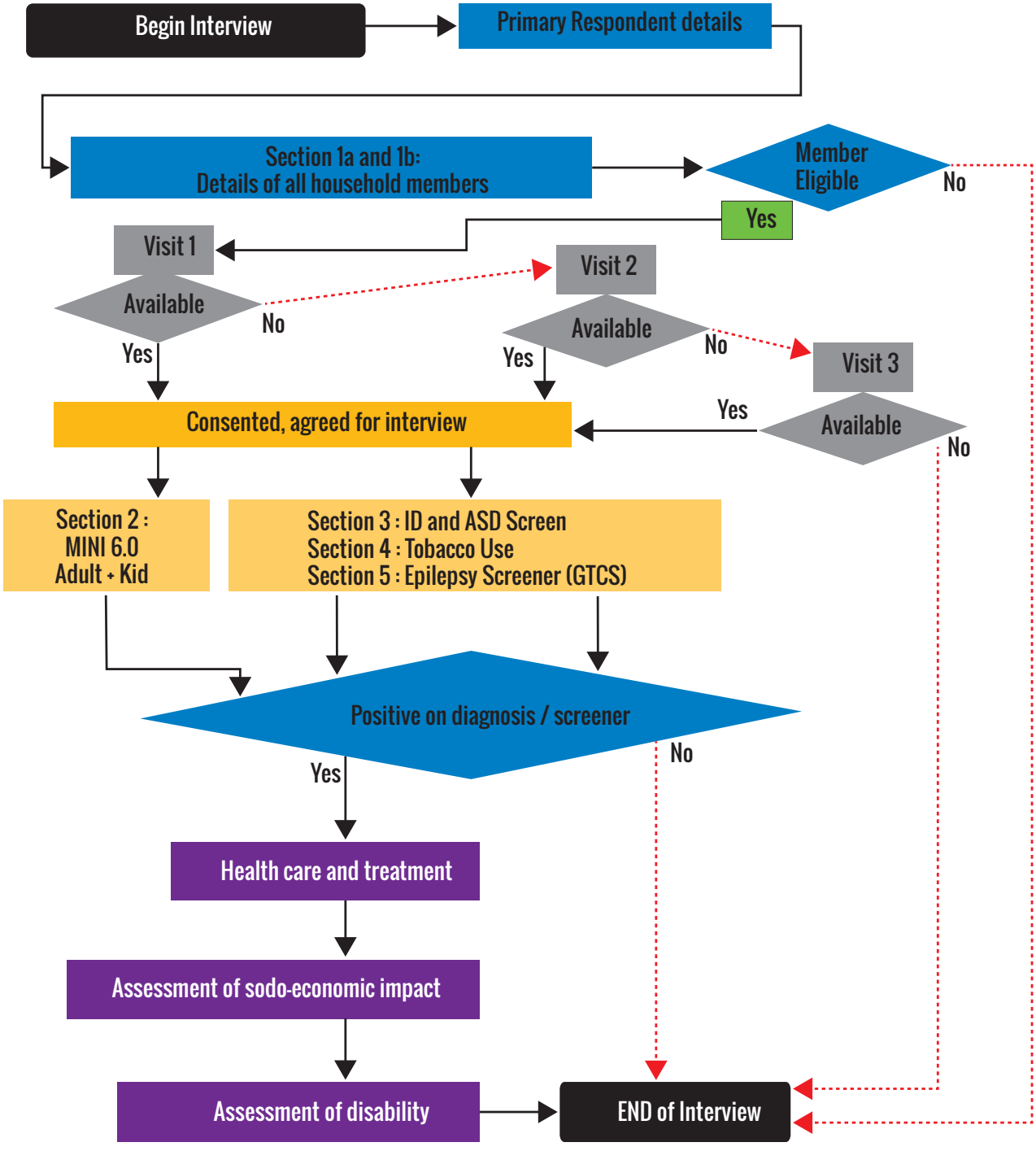
refresher training programmes were held at different time points based on a review of survey data and needs expressed by the NMHS MP 2015-16 team. A training module detailing the schedule, methods, and steps of training developed by NIMHANS team was used in the survey. Overview of training program is given as annexure. (Annexure 1)

Data Collection

Data was collected by trained field investigators using Hand Held Devices specially configured for the survey.

The flow chart below provides details of conducting interviews using hand held devices that are loaded with all the study instruments in local language i.e. Hindi (Fig. 2).

Figure2: Flow of Interview



Data storage and transfer

The protocol for data collection, storage and ensuring backup operationalized during the pilot study was adopted for the main study also. The state Principal Investigator (AMK) was the custodian for all the data gathered locally and ensured that there is restricted strictly authorized access to data. Operationally, the following back up measures was ensured e.g.; Daily back up of data on the tablets itself, consolidated data backup by the co-ordinator both on Daily basis and weekly basis. Using National Informatics Centre's secured National Knowledge Network (NKN) data was transferred to NIMHANS servers periodically. (Annexure 2)

Quality Assurance

Quality in data collection was ensured by training each of the field data collectors systematically and in a comprehensive mode. One to two percent of the total interviews were independently scrutinized for quality control. 5% re-interviews by PI/CoIwere included for quality control and to set up strict monitoring mechanism.

Analysis of Data

After the completion of data collection, the encrypted data was sent to NIMHANS. Analysis was done by the core team of NIMHANS. The results were then sent to the state Principal Investigator (AMK).

Descriptive analysis was done by estimation individual frequencies for various characteristics. The International Classification of Disease, 10threvision, Diagnostic Criteria for Research(ICD 10 DCR)12. Current (Point) prevalence is reported for all diagnostic groups (ICD categories F10-19, F40-48), and both current and life-time prevalence (ever in the life of an individual in the past) is reported for select conditions under F20-29, F30-39 and panic disorders. This survey was undertaken in 3 districts which were selected after stratification, therefore to calculate state representative prevalence of mental morbidity corresponding weights were used and weighted prevalence are reported. Design weight was calculated by considering probability of selection of district and talukas in state. Individual non-response rate was also accounted for and finally state level weighted prevalence is reported.

Phase2: Qualititative Part

The purpose of qualitative component of the study was to explore the charachteristics of drug/substance abuse, geographic region specific mental health problems, stigma towards mental health problems and mental health care seeking pattern of communities and barriers/challenges to mental health care. For this part, two Focus Group Discussions [FGDs] (One each with patients and health care providers) & four Key Informant Interviews

[KIIs] (one each with Health Care Provider, social worker, health care provider from NGO and Pharmacist) were conducted in every selected district.

All the KIIs and FGDs were done through an Interview guide. Strict protocols were established for data collection, compilation and transfer in management with access controlled mechanisms.[18]

Ethical Issues

The study protocol was approved by NIMHANS Institutional Ethics Committee and Institutional Human Ethical Committee, All India Institute of Medical Sciences Bhopal prior to the start of study. Written consent in local language (Hindi) was obtained from all the respondents for participating in the study. Recognising the need to combine survey with service, specific referral mechanisms were set up to ensure and assure the need for treatment. The education material was developed in local language on mental health issues to create awareness among community and same was distributed by the FDCs during the data collection in households, schools and Panchayats.

Every attempt was made to involve local community leaders, school teachers, Panchayat Raj Institution members and political leaders to create awareness related to MNSUDs in the community.

RESULTS

Section1: Prevalence, Pattern and Outcomes

Population Characteristics of Madhya Pradesh

As per census 2011, the population of MP state is 7.26 crores, sex ratio is 931 and proportion of male population is 51.8%. The proportion of less than 18 years and elderly population is 40% and 7.9% respectively. Male literacy rate is 78.7% however; overall literacy rate is 69.3%. The urban population is 27.6% and tribal population is 21%. (Table 3)

Table3 : Population Characteristics of Madhya Pradesh

S. No	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 years age groups (%)	39.6
6	60 years and above age groups (%)	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

Administrative and economic characteristics of Madhya Pradesh

The MP state has currently 51 districts, 342 Talukas/ sub districts and 54,903 villages. There are 29 towns with 1 lakh to less than 1 million population and 4 cities with population more than a million. The Per capita income in 2013-2014 was 51,798 INR and Poverty Headcount Ratio is 37. (Table 4)

Table 4: Administrative and economic characteristics of MadhyaPradesh

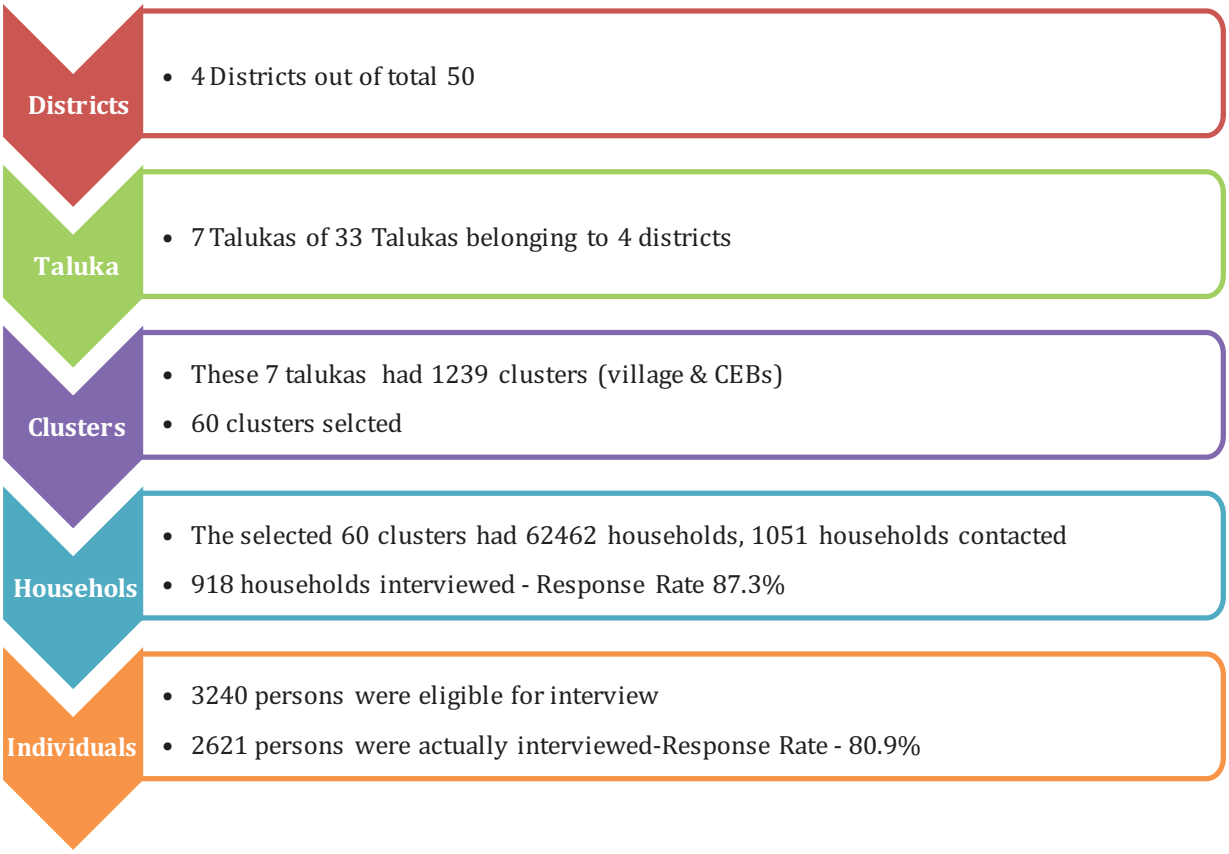
S. No	Characteristics	
1	Districts*(n)	50
2	Districts as on 2016# (n)	51
3	Taluka/Sub-district * (n)	342
4	Villages* (n)	54,903
5	Towns with 1 lakh to <1 million population* (n)	29
6	Million plus cities*(n)	4
7	Per capita income in 2013-2014 (in INR) $	51,798
8	Poverty Headcount Ratio$$	37.09

*Source: *Census 2011; # (http://www.mpdistricts.nic.in/); $-Central Statistical Organization; $$-NSSO 68th round.*

Sampling framework of National Mental Health Survey in M.P.

Out of 50 districts, 4 districts were selected for NMHS MP 2015-16 and among 33 talukas of these 4 districts, 7 were selected, comprising 1239 clusters. From these 60 clusters were selected. These 60 clusters comprised of 62,462 households, from them, 1051 were contacted. The response rate at households was 87.3%, while the percentage of eligible individuals interviewed was 80.9%. (Figure3)

Figure3: Sampling framework of National Mental Health Survey Madhya Pradesh State 2015-16



Prevalence and pattern of mental disorders in MP, 2015-16

Mental disorders are a diverse group of conditions varying in their presentation ranging from acute to recurrent to chronic, mild to severe, multiple disorders to single illness, morbid or co-morbid conditions and in several other ways. The prevalence of these disorders are also measured in number of ways like life time, past year, previous month and even in the last two weeks. Without the availability of objective tests for mental disorders, capturing precise estimates of these disorders in population based surveys has always been a challenge, globally; and will continue in the years to come. The prevalence rates of mental disorders are also critically influenced by a wide variety of factors, ranging from socio-economic and other environmental determinants, variations in perceived threshold of distress, differences in assessment tools, choice of symptom thresholds in disease definitions and interpretations of results.

Mental disorders contribute to a substantial disease burden in MP

Based on uniform and standardised data collection procedures from a state representative population, it is estimated that, mental morbidity of individuals above age of 18 years currently is 13.9% (95% CI 13.7-14.1). The life time prevalence in the surveyed population was 16.7% (95% CI 16.5-16.9). This proportion of the population who is currently suffering from a mental disorder requires an active intervention. This estimate includes a range of mental disorders F10 – F49 categories within the International Classification of Disorders (ICD -10). Translated to real numbers (based on weightage for different levels), large number of individuals are in need of active interventions in the state.(Table 5)

The prevalence of alcohol use disorder was 10% and other substance use disorder, except tobacco use was 0.6% and the prevalence of tobacco use disorder was the highest i.e; 35%. (Table 5)

The current and lifetime prevalence of Schizophrenia and other Psychotic disorder was 0.3 and 0.9% respectively. The current and lifetime prevalence of mood disorders in the state were 1.4 and 4.5% respectively. The prevalence of Depressive disorder was 1.4 and 4% respectively in current and lifetime. The current & lifetime prevalence of neurotic and stress related disorders were 2% and 2% respectively. The current and lifetime prevalence of Bipolar Affective Disorders were 0.06 & 0.4% respectively. (Table 5)

The prevalence of Generalized Anxiety disorder (GAD) was 0.15%, Other Anxiety disorder was 0.4%, Panic disorder was 0.1%, panic disorder with limited symptoms was 0.2%, Obsessive compulsive Disorder was 0.4%, OCD NOS was 0.4% and reaction to severe stress and adjustment disorders (PTSD) was 0.2%. (Table 5)

Table 5: Weighted Prevalence (in %) of Mental morbidity as per ICD-10 DCR among adults 18+ years (n=2621)

ICD - 10 DCR	Lifetime (95% CI)	Current (95% CI)
Any mental morbidity	16.7 (16.53-16.86)	13.9 (13.74-14.05)
F10-F19-Mental and behavioural problems due to psychoactive substance use	36.57 (36.36-36.78)	
F10 Alcohol use disorder	10.33 (10.19-10.46)	
F11-F19, except F17 Other substance use disorder	0.57 (0.53-0.6)	
F17 Tobacco use disorders	34.89 (34.68-35.1)	
F20-F29 Schizophrenia and other psychotic disorder	0.89 (0.85-0.93)	0.34 (0.32-0.37)
F30-39 Mood (Affective) Disorders	4.51 (4.42-4.6)	1.41 (1.36-1.46)
F30-31 Bipolar Affective Disorders	0.36 (0.33-0.39)	0.06 (0.05-0.07)
F32-33 Depressive Disorder	4.18 (4.1-4.27)	1.39 (1.33-1.44)
F40-F48 Neurotic and stress related disorders	2.32 (2.25-2.39)	2.1(2.04-2.16)
F40 Phobic anxiety disorders	1.4 (1.35-1.45)	
F40.0 Agoraphobia	1.02 (0.97-1.06)	
F40.1 Social Phobia	0.59 (0.56-0.63)	
F41 Other Anxiety disorder	0.64 (0.6-0.67)	0.42 (0.39-0.45)
F41.0 Panic disorder	0.33 (0.31-0.36)	0.11(0.1-0.13)
F 41.1 Generalized Anxiety Disorder	0.15 (0.13-0.17)	
F41.9 Panic disorder with limited symptoms	0.16 (0.14-0.18)	
F42 Obsessive Compulsive Disorder	0.40 (0.37-0.43)	
F42.0 to 42.8 OCD current	0.19 (0.17-0.20)	
F42.9 OCD NOS	0.40 (0.37-0.43)	
F43 Reaction to severe stress and adjustment disorders (PTSD)	0.20 (0.15-0.24)	

Mental morbidity as per socio economic characteristics in MP

The current and lifetime prevalence of Mental Morbidity was highest in the second quintile of socioeconomic group, followed by middle quintile in the state. The lowest quintile also has high current and lifetime prevalence of mental morbidity i.e.; 14 & 18% respectively. As per expectation highest quintile has least mental morbidity.(Figure 4)

Prevalence of mood disorders by age, gender and residence

The overall prevalence of current mood disorder was 1.4%. Comparing different age groups it was found highest among the elderly i.e.; 3% followed by age group of 50-59 years. Likewise lifetime risk of mood disorder was highest in age group of 50-59 years and was lowest among 18-29 year age group. (Table 6) (Figure 5). The prevalence of life time and current mood disorder was higher among females than males.(Table 6)

Fig. 4 : Prevalence of Mental Morbidity as per socioeconomic charactristics (%)

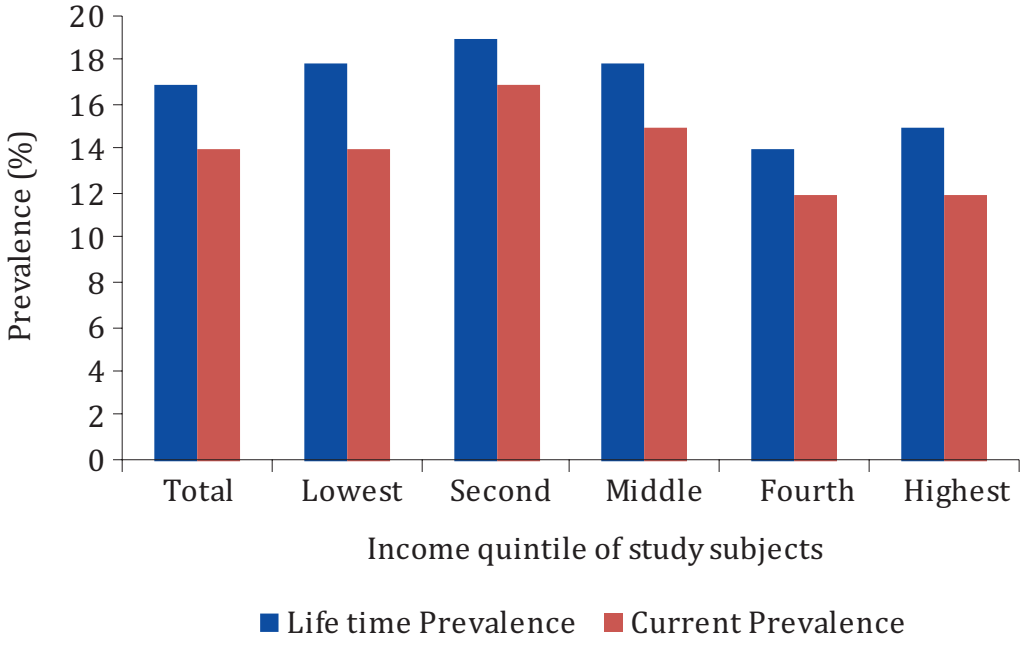


Table 6: Prevalence of mood disorders by age, gender and residence (%)

Characteristics	Life time (95%-CI)	Current (95%-CI)
Total	4.51(4.42-4.6)	1.41(1.36-1.46)
Age group		
18-29	2.03(1.92-2.14)	0.78(0.71-0.84)
30-39	3.98(3.8-4.15)	0.54(0.48-0.61)
40-49	7.2(6.93-7.47)	1.81(1.67-1.94)
50-59	7.75(7.41-8.09)	2.77(2.56-2.98)
60 and above	5.35(5.07-5.63)	2.93(2.72-3.14)
Gender		
Female	4.74(4.61-4.86)	1.82(1.74-1.9)
Male	4.25(4.13-4.38)	0.96(0.9-1.02)
Place of Residence		
Rural	4.61(4.51-4.72)	1.24(1.18-1.3)
Urban non-metro	3.18(3.01-3.35)	1.48(1.37-1.6)
Urban metro	8.56(7.99-9.12)	3.74(3.36-4.12)

Table 5: Rural urban differentials in prevalence of Mood disorders (F30-39)

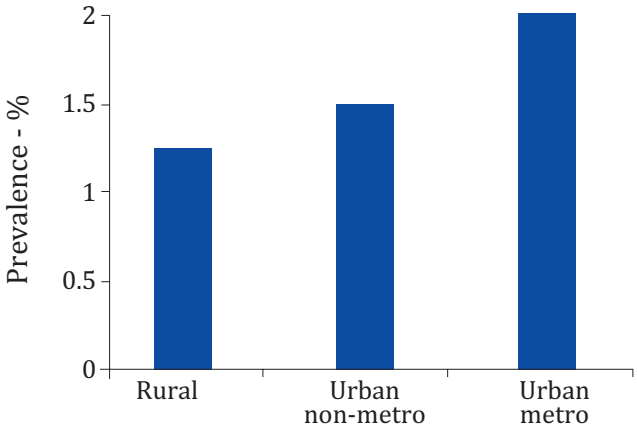
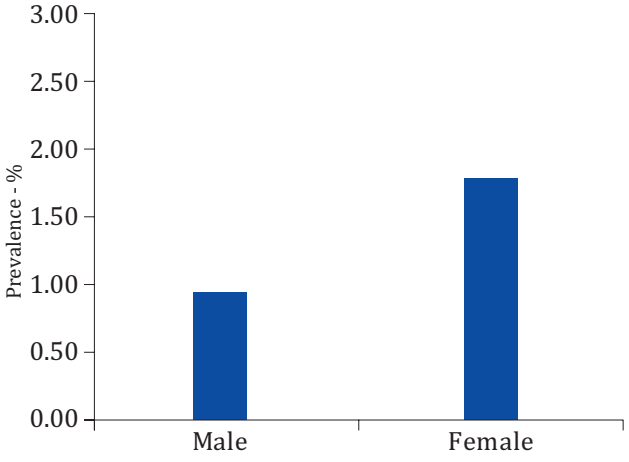


Table 6: Gender differentials in prevalence of Mood disorders (F30-39)



In context of place of residence, the prevalence of life time and current mood disorder was strikingly higher in urban metro when compared to urban non-metro and rural counter parts. (Figure 5)

Prevalence of Depressive disorders by age, gender and residence

Overall, the prevalence of current and life time depressive disorder was 1.4 &4.2% respectively. The prevalence of current Depressive disorder increases approximately with increasing age. The prevalence of life time depressive disorder also increases with the age except at elderly where it decreases. (Table 7)

Both current and life time depressive disorder was found higher among female sex. (Table 7)

The prevalence of current and life time depressive disorders were higher among people who live in urban metros with respect to their counterparts living in rural and urban non-metro cities. (Table 7)

Table 7: Prevalence of Depressive disorders by age, gender and residence (%)

Characteristics	Life time (95% CI)	Current (95% CI)
Total	**4.18 (4.09-4.27)**	**1.39 (1.33-1.44)**
Age group		
18-29	1.82 (1.72-1.92)	0.7 (0.64-0.77)
30-39	3.62 (3.45-3.79)	0.54 (0.48-0.61)
40-49	6.88 (6.62-7.14)	1.81 (1.67-1.94)
50-59	7.59 (7.26-7.93)	2.77 (2.56-2.98)
60 and above	4.6 (4.34-4.87)	2.93 (2.72-3.14)
Gender		
Female	4.33 (4.21-4.45)	1.77 (1.69-1.85)
Male	4.02 (3.9-4.15)	0.96 (0.9-1.02)
Place of Residence		
Rural	4.24 (4.13-4.34)	1.24 (1.18-1.3)
Urban non-metro	3.09 (2.92-3.26)	1.48 (1.37-1.6)
Urban metro	8.02 (7.48-8.57)	3.21 (2.85-3.56)

Prevalence of Neurosis and stress related disorders by age, gender and residence

In the present study the current and life time Neurosis and stress related disorders were 2.1 & 2.3%respectively. The prevalence of Neurosis and stress related disorders in different age groups revealed that both current and life time prevalence was higher in 30-49 year age group and lowest in the elderly. Both current and life time prevalence were found to be higher in female gender and people living in urban metros. (Table 8)

Table 8: Prevalence of Neurosis and stress related disorders by age, gender and residence (%)

Characteristics	Life time (95%-CI)	Current (95%-CI)
Total	2.32 (2.25-2.38)	2.1 (2.03-2.16)
Age group		
18-29	2.11 (2-2.21)	2.05 (1.95-2.16)
30-39	2.44 (2.3-2.58)	2.25 (2.11-2.38)
40-49	2.99 (2.81-3.16)	2.99(2.81-3.16)
50-59	2.19 (2-2.37)	1.26 (1.12-1.4)
60 and above	1.83 (1.66-2)	1.46 (1.31-1.61)
Gender		
Female	2.46 (2.36-2.55)	2.3 (2.21-2.39)
Male	2.17 (2.07-2.26)	1.88 (1.79-1.97)
Place of Residence		
Rural	2.28 (2.2-2.36)	2.01 (1.94-2.08)
Urban non-metro	2.25 (2.11-2.4)	2.17 (2.02-2.31)
Urban metro	3.21 (2.85-3.56)	3.21 (2.85-3.56)

Prevalence of General anxiety disorders by age, gender and residence

The overall prevalence of GAD was 0.15% in the present survey. Comparing different age groups its prevalence was highest in the elderly population. It was also found to be higher among people living in urban metros. (Table 9)

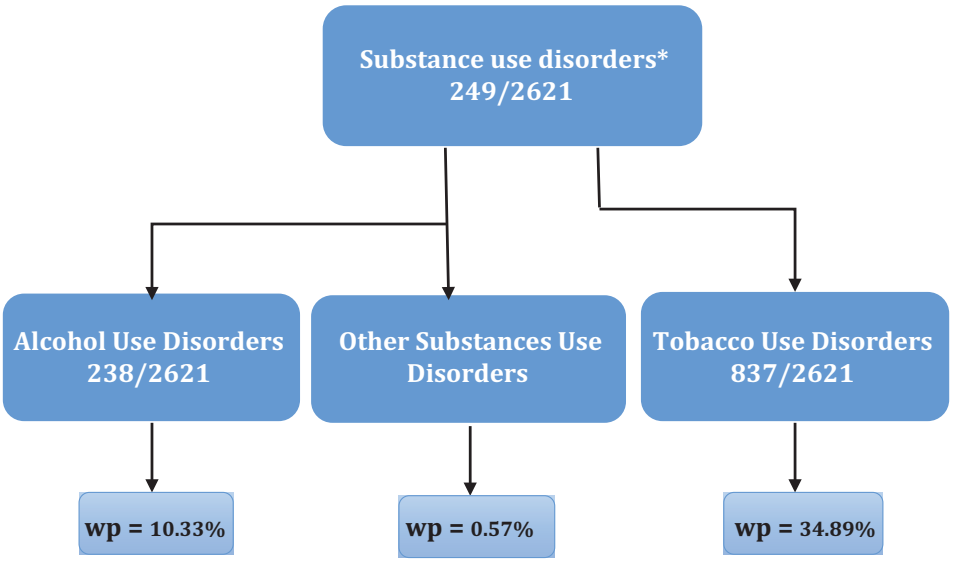
Table 9: Prevalence of General anxiety disorders by age, gender and residence (%)

Characteristics	Current Prevalence (95% CI)
Total	**0.15 (0.13-0.17)**
Age group	
18-29	0.14 (0.11-0.16)
30-39	0.00
40-49	0.24 (0.19-0.29)
50-59	0.00
60 and above	0.47 (0.38-0.55)
Gender	
Female	0.28 (0.25-0.32)
Male	0.00
Place of Residence	
Rural	0.16 (0.14-0.19)
Urban non-metro	0.00
Urban metro	0.53 (0.39-0.68)

Substance use disorders in M.P. 2015-2016

The prevalence of any substance use disorder in MP was found to be 11%. It was as high as 35% for tobacco, 10% for Alcohol use disorder and 0.6% for other substance use disorder. (Figure 7) The social acceptance and cultural norms has encouraged tobacco consumption in the state especially in rural areas.This might be the probable reason for such a high prevalence of tobacco use disorder in the state.

Figure 7: Prevalence of Substance use disorders among adults 18+ age groups



*Footnote : *Substance use disorders excluding Tobacco use. wp Weighted Prevalence*

Any substance use disorder was highest among the age group of 30-59 years and lowest among 18-29 years i.e.; 6.8%. Similarly, the prevalence of tobacco use disorder was found to be highest among the same economically productive age group 30-59 years. Alcohol use disorder was highest among 40-49 year age group i.e.; 16% followed by 30-39 year age group i.e.; 12%. In the inter-state neighbouring districts of the state,by-products of opium like Bhang, Sanan, Hashish, Ganja(Crude opium), were the main items of substance use disorders. At many places it is cultivated illegally in the kitchen garden and being consumed. In other parts of the state, it was noticed that other products such as whitener, thinners and some derivatives of barbiturates etc were common substance use disorders i.e.;. Its consumption was highest among 30-39 year age group and lowest among 18-29 year age group. (Table 10)

Any substance use disorder was predominately found in the male population. For instance it was 21% in males as compared to 1% in females. More than 52% male consume tobacco in one form or another while it is only 19% in females. Every one in five male has Alcohol use disorder. Among females alcohol use disorder and Other Substance use disorderswere found to be very limited in the survey. (Table 10)

In context of place of residence, the prevalence of any substance use disorder was highest among the urban non-metro and was lowest in metro areas. The prevalence of tobacco use disorder was highest among the rural areas accounting for 36% and lowest in urban metro i.e.; 22%. Alcohol use disorder was highest among the urban non-metro and was lowest in the metro areas. The prevalence of other substance use disorders were found similar across the place of residence i.e.; 0.5%. (Table10)

Table 10: Prevalence of Substance Use Disorders by age, gender and place of residence (%)

Characteristics	Any substance use disorder (95% CI)	Alcohol use disorder (95% CI)	Other Substance use disorder (95% CI)	Tobacco use disorder (95% CI)
Total	10.62 (10.48-10.75)	10.33 (10.19-10.46)	0.57 (0.53-0.6)	34.89 (34.68-35.1)
Age group				
18-29	6.82 (6.63-7.01)	6.74 (6.56-6.93)	0.26 (0.22-0.3)	23.81 (23.49-24.13)
30-39	12.55 (12.25-12.85)	12.27 (11.97-12.57)	0.83 (0.75-0.91)	37.35 (36.91-37.79)
40-49	16.63 (16.24-17.01)	16.07 (15.69-16.45)	0.76 (0.67-0.85)	45.72 (45.21-46.24)
50-59	10.28 (9.89-10.67)	9.74 (9.36-10.11)	0.54 (0.45-0.64)	40.81 (40.19-41.44)
60 and above	9.1 (8.75-9.46)	8.81 (8.46-9.17)	0.66 (0.56-0.76)	39.5 (38.89-40.11)
Gender				
Female	1.36 (1.29-1.43)	1.36 (1.29-1.43)	0.00	18.83 (18.59-19.07)
Male	20.85 (20.59-21.11)	20.23 (19.98-20.49)	1.2 (1.13-1.26)	52.63 (52.31-52.94)
Place of Residence				
Rural	10.52 (10.37-10.68)	10.23 (10.07-10.38)	0.58 (0.54-0.62)	36.48 (36.24-36.73)
Urban non-metro	11.83 (11.52-12.14)	11.6 (11.29-11.91)	0.54 (0.47-0.61)	32.12 (31.67-32.58)
Urban metro	6.95 (6.44-7.46)	6.42 (5.93-6.91)	0.53 (0.39-0.68)	21.93 (21.09-22.76)

Observations from FGDs & KIIs

Problem pattern and impact of drug/ sustance abuse

The people of state use diverse type of drugs/ sustance for abuse. The most common were Tobacco products like Khaini, Gutka, Nus, Bidi, Madhu, munnka (sasan) etc. The consumption of by-products of opium like Bhang, Sanan, Hashish, Ganja(Crude opium) were found common and socially accepted in the inter-state neighbouring districts of the state. At many places it is cultivated illegally in the kitchen garden and being consumed. Few health care workers reported some unusual form of substance abuse like cough syrups, drugs like diiclofenac, cetrizine derivatives of barbiturates, whitener and thinners. However most of the people admitted its adverse effect as reflected by the following comment

"The person, who is indulge in substance abuse has negative attitude towards family members, which in turn has a negative impact on family andpoverty increases".[KII of a Health care worker]

Reasons of Substance abuse

Different people reported different reasons for sustance abuse. The most common reasons quoted were cultural practice, peer pressure, curiosity, adventure and family conflicts. Here are the following unusual quotes:

"Gum bhul jate hai isko lene ke bad"[FGD] means

Once I consume it, I forget all my worries"

"Roti acchi khilati hai " [FGD] means
"My appetite increases (Once I consume it)"

Stigma towards mental health problems

There was concensus in the community about the associated sdtigma for Mental illness as reflected by the following observation of a data collector

"The people (do) not want to talk about mental health problems, they think that it is not a matter of discussion rather it is matter of personal issue. Only after very long motivation they become ready for the group discussion."

Many people believes that mental illness is becuse of black magic or Goddess rage and it needs devine intervention to get rid of it.

"Its goddess rage, black magic or evil eye, that's why mental health problems cannot be cured". [FGD of patients]

Mental Health care seeking pattern of communities

Most of the patients seek mental health care from Temples, Daragah, Local priest or traditional healer before reaching to hospitals. As explain by the following quote

"The first choice (for seeking Mental Health Care) is either temple or dargah. After spending long time, they used to go to a medical doctor."[KII of Health care worker]

Another quote suggest that people used to

seek medical advise only if they feel illness is severe.

"There is difference in health care seeking pattern; For mild to moderate cases they seek help from temple, dargah or traditional healers. Once they realise that condition is severe then only seek help from medical doctors". [KII]

The Health care providers admitted that most of the patients could manage to seek advice from Mental Health Care professional because of costly treatment, distant hospitals, lack of professionals and unawareness of availability of treatment (For Mental Illness).

Incidence and Pattern of Suicide rates in MP, 2016

The overall incidence of suicide in MP is 11.9 per 1,00,000 population. It is higher in male sex. In different age groups it is highest in the 18-29 year age group i.e.; 24.5 per 1,00,000 population followed by the 30-45 year age group. Thus the group of age 18 to 45 year which is most economically productive age group has the highest incidence in the state. (Table 11)

Source: National Crime Records Bureau-2014

In this study too, the prevalence of suicide risk was 0.8%. It was highest in the age group of 30-49 years, males and urban metro population. (Table 12)

Table 11: Suicide incidence rate (per 1,00,000 population)

Characteristics	MP
Total	11.9
Gender	
Male	14.2
Female	10.56
Age group	
Below 14 years age group	0.64
14 and above – below 18 years	14.97
18 and above – below 30 years	24.55
30 and above – below 45 years	17.97
45 and above – below 60 years	14.27
60 years & above	7.58

Table12: Prevalence of Suicidal risk by age, gender and residence (%)

Characteristics	High risk (95% CI)
Total	**0.81 (0.77-0.85)**
Age group	
18-29	0.47 (0.42-0.53)
30-39	1.01 (0.92-1.1)
40-49	1.32 (1.21-1.44)
50-59	0.94 (0.82-10.06)
60 and above	0.47 (0.39-0.56)
Gender	
Male	0.93 (0.87-0.99)
Female	0.67 (0.62-0.72)
Residence	
Rural	0.68 (0.64-0.72)
Urban non-metro	0.83 (0.74-0.91)
Urban metro	2.67 (2.35-3)

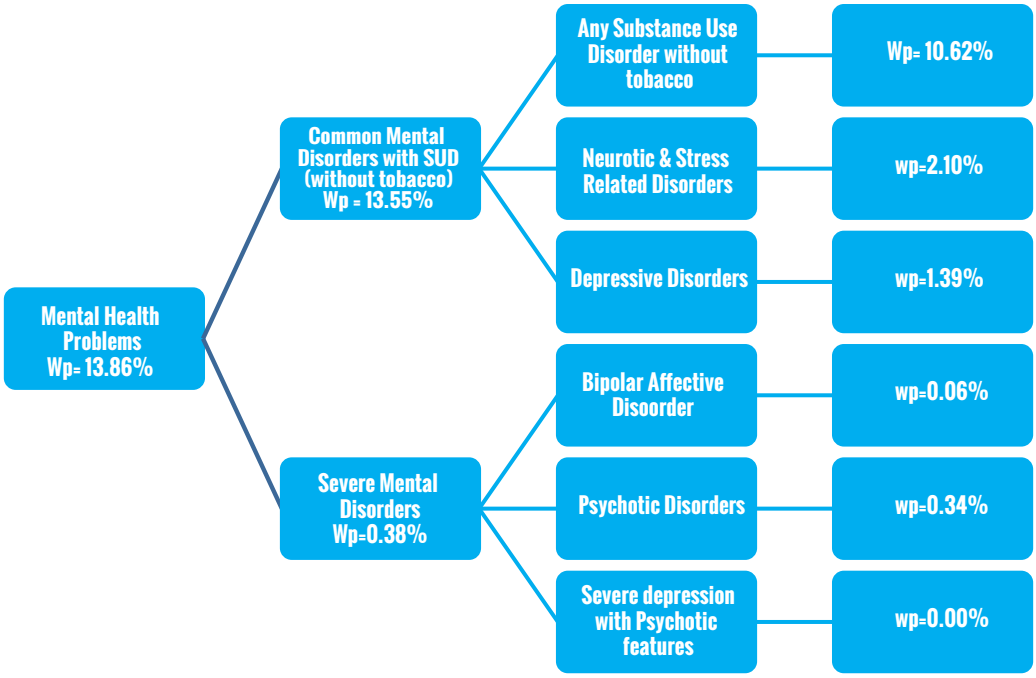
Prevalence and pattern of severe mental morbidity

Common mental disorders (CMDs), including depression, anxiety disorders and substance use disorders pose a huge burden affecting nearly 13.5% of the population. This group of disorders are also closely linked to both causation and consequences of several non-communicable disorders (NCD), thereby contributing to a significantly increased health burden. These disorders have previously been unaddressed in the planning and delivery of health care programmes. Individuals and families also ignore and neglect these disorders till they become severe. (Fig. 8 & 9)

Treatment gap, disabilities and impact of mental disorders, 2016

Overall, for all mental health problems treatment gap is as high as 91% in the state. Treatment gap of various mental disorders e.g.; Neurological disorders, major depressive disorders, bipolar affective disorders, schizophrenia and other psychotic disorders substance use disorders like alcohol use, tobacco use and other substance use disorders have been quantified and summarized in following figure. (Figure 10)

Figure 8: Current Prevalence of common and severe mental disorders among adults 18 years and above



*Footnote : *Substance use disorders excluding Tobacco use, wp= Weighted Prevalence*

Figure 9 : Current Prevalence : Common and Severe Mental Disorders (%)

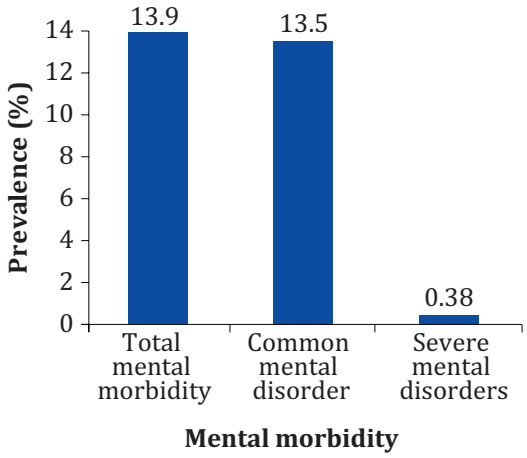
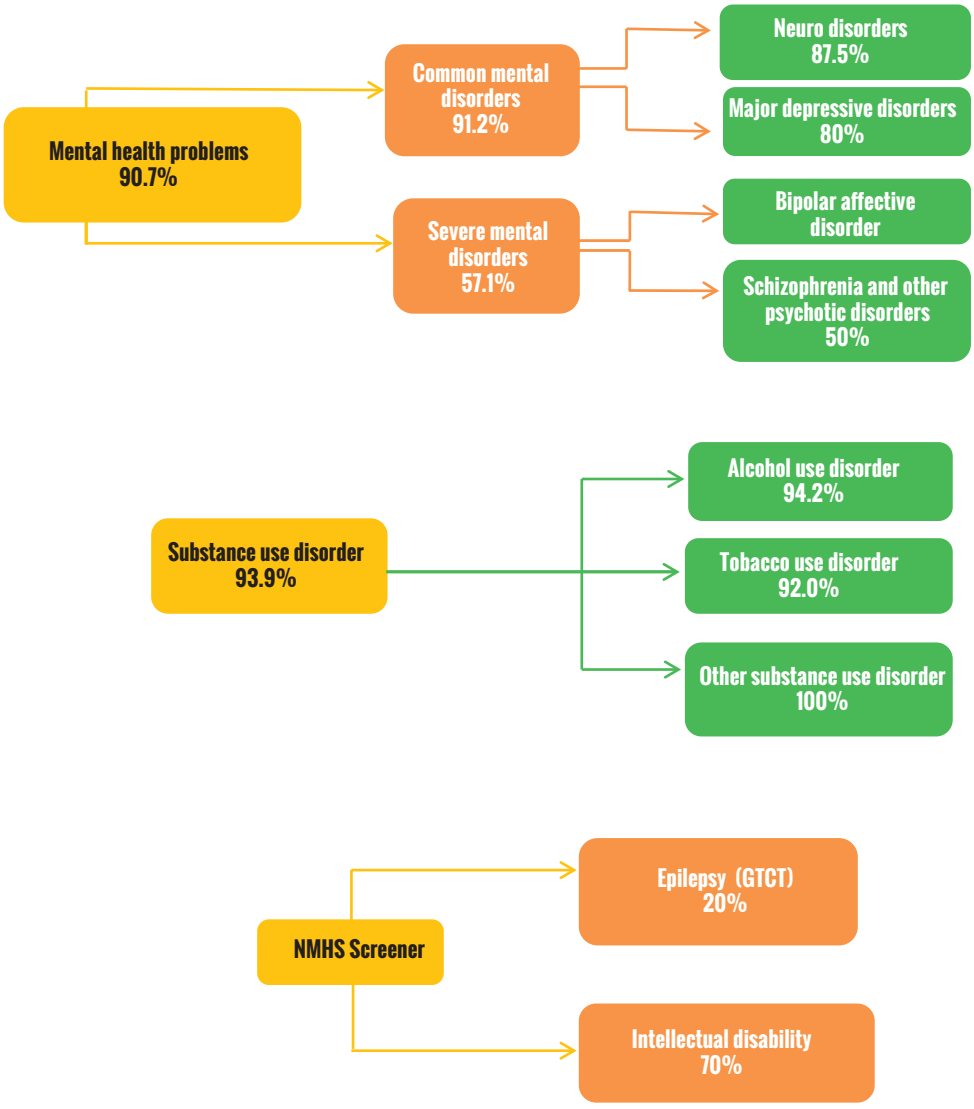


Figure 10: Treatment gap for mental morbidity



Treatment patterns and care characteristics among respondents with current mental morbidity

Out of total333 patients identified with current mental morbidity during this survey only 31 were currently on treatment, so the treatment gap was staggering 90.7%. The median duration of illness was 132 months and the median interval between onset of illness and consultation was one year. Median number of health care provider consulted by patient was 2 and 74% patients admitted that most recent provider being a government doctor. Median duration of treatment of patients was 5 years. (Table 13)

Table 13: Treatment patterns and care characteristics among respondents with current mental morbidity

Characteristics (n=333)	Figure
Currently on treatment	31
Treatment gap (%)	90.69
Median duration of illness (in months)	132(1-480)
Median Interval between onset of illness and consultation (months)	12(1-352)
Median number of treatment providers consulted	2(1-10)
Most recent provider being a government doctor - n (%)	23(74.19%)
Median duration of being on treatment(months)	60(1-480)
Gender	
Male	0.93(0.87-0.99)
Female	0.67(0.62-0.72)
Residence	
Rural	0.68(0.64-0.72)
Urban non-metro	0.83(0.74-0.91)
Urban metro	2.67(2.35-3)

Footnote : Numbers in the parenthesis indicates Range i.e., Minimum-Maximum

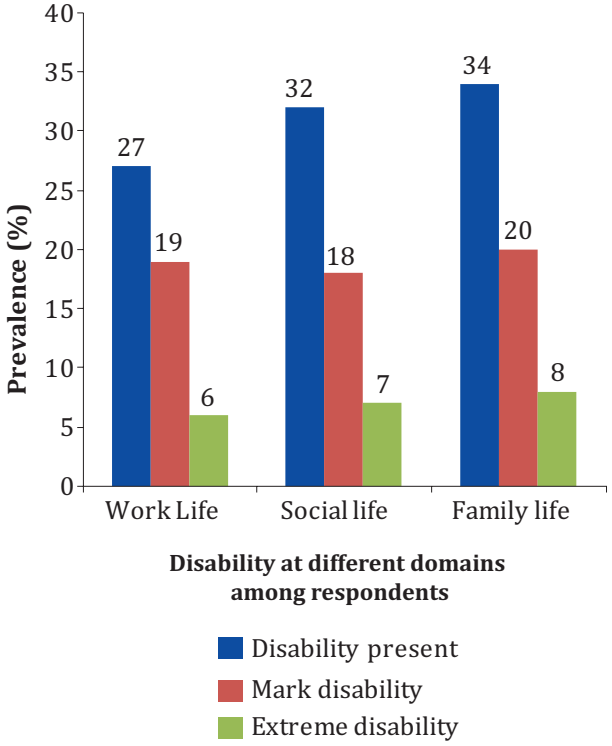
Self-Reported Disability among respondents with current mental Illness

The self-reported disability among respondents with current mental Illness was more in family and social life compared to work life. This may be due to the stigma associated with the mental illness in the community. However, in all three domains, the extreme difficulty due to mental illness was present in less than one fourth respondents. Considerable disability (marked and extreme) was observed in nearly one fourth of subjects with mental disorder. (Fig. 11)

Patients with mental morbidity experiencing difficulty with activities of life

81% of the respondents with mental morbidity could do their day to day activities as usual i.e.; 81%. This may be due to the fact that most of them are suffering from common mental illness and that too of long duration so they have learned to do their daily activity without experiencing difficulty.(Figure 11)

Figure11 : Self - Reported Disability among respondents with current mental Illness



Footnote : Extreme disability includes severe levels of disability interfering in work, social life and family related activities

Socioeconomic impact of mental morbidity

During the survey, a total of 333 patients of mental morbidity were identified. Out of these 333 patients, the respondents were reported to have a median duration of difficulty to carry out daily activities for 25 days, in the past 30 days. Family members were not able to go for work for a median 5days in the past three months, in order to care the patients. In last 30 days, a median 6 days of family, social or leisure activities was missed by the patients and 1450 Rupees INR was Median monthly expense on the morbidity of the patients. (Table14).

Table 14: Socioeconomic impact of mental morbidity

Socio economic impact (n=333)	Figure
Median number of days with difficulties to carry daily activities, in the past 30 days	25 days
Median number of days family members were not able to go for work in the past three months, for care of the patient	5 days
Median number of day's family, social or leisure activities was missed.	6 days
Median monthly expense (Indian rupees)	1450 rupees

SECTION 2: STATE MENTAL HEALTH SYSTEM ASSESSMENT

Introduction

A well-coordinated, balanced and efficient health system is central to the delivery of health care to the people. A health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health.[23] The causes and consequences of mental health problems are highly complex and need to be addressed across the system rather than in isolation. The system approach identifies the area in mental health where each system succeeds, where it breaks down, and what kinds of integrated approaches will strengthen the overall system. Thus, the system approach in the mental health will enable policy makers to devise a frame work that will deliver high quality mental health services to reduce the mental health-treatment gap and strengthen preventive/promotive measures along with rehabilitative services.

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

The National Mental Health System Assessment MP(NMHS MP 2015-16A) is a systematic and comprehensive analysis of components and sub- components of health systems that cater to the delivery of mental health services at state level. With this background, this part of study has following objectives;

1. To examine the available health related resources for mental health activities/ programmes in the state of Madhya Pradesh.
2. To examine the status of mental health services and programmes in the state of Madhya Pradesh through a system assessment framework.

Methodology

The methods used for SMHA were mostly qualitativeand collation of available data. With the review of the WHO-AIMS and the WHO Atlas, the proforma for the study process was developed based on the lessons learnt in Kolar and Tamil Nadu .[24, 25] After discussions with

NMHS and state PI and NMHS MP 2015-16A co-ordinator, consultation with stake holders and domain experts, the SMHA proforma was finalised and training in data collection activities were completed.

The final tool for data collection for the NMHS MP 2015-16A included a set of ten domains and sub-domains. The focus of data gathering was on - general information about the state, health resources (number of government and non-governmental health care institutions, availability of health human resources and state health management information systems) in the state, existing mental health systems and resources (presence of mental health care facilities and human resources), mental health policy, action plan to implement the same, the state authorities responsible for mental health activities, legislation and implementation related to mental health, financing, budgetary provisions, availability of drugs, intra- and intersectoral collaboration, social welfare activities, engagement of civil societies in mental health programmes, Information Education Communication(IEC) activities and monitoring.(For further details please refer National Mental Health Report). [18]

Data for the NMHS MP 2015-16A was obtained from multiple sources by actively involving and interacting with key persons at different levels both within and outside the health system. Data collection (conducted from September to March 2015) was reviewed periodically. Once the data status was finalised, a set of 15 quantitative indicators were developed based on the details available in the NMHS MP 2015-16A proforma. Five morbidity indicators on the current burden of mental illness were obtained from the NMHS. A set of 10 qualitative indicators covering 10 essential domains of the mental health system, based on a scoring pattern has been developed for assessment.

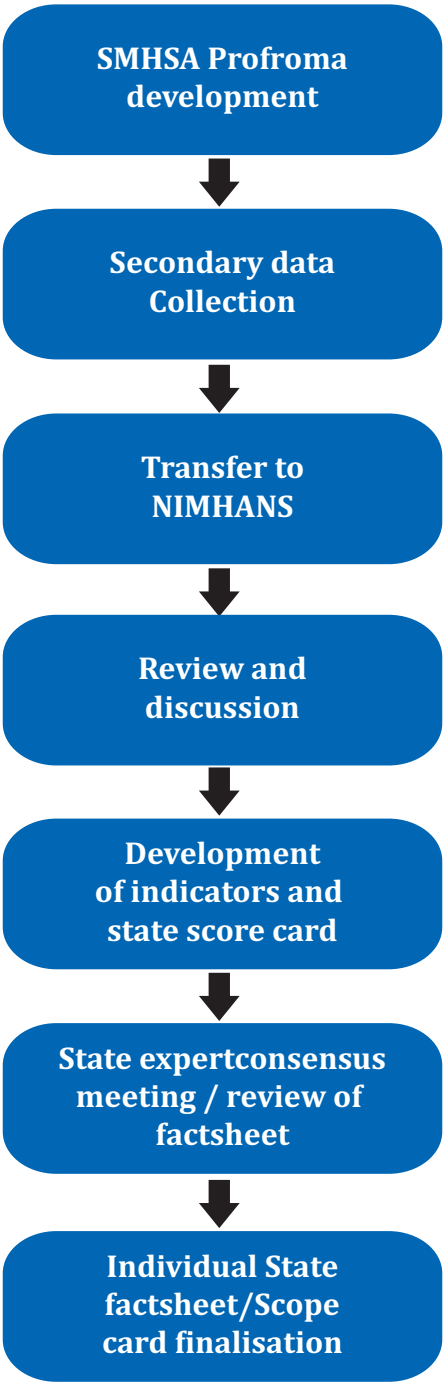
State level consensus meeting

Formation of State Advisory Committee and holding first meeting was completed on May 2016; this comprises the Mr Manish Singh (Deputy Director, NRHM), Dr ArunKokane, PI, (Additional, Professor of Community and Family Medicine, All India Institute of Medical Sciences, Bhopal), Dr Krishna Prasad (Ex-Assistant Professor, Psychiatry, AIIMS Bhopal) and Dr Sanjay Shrivastava (Clinical Director, PRIME) as members. Written communication with various stake holders was done along with ssensitizing higher level official about the importance of NMHS MP 2015-16A and requested to direct the concerned persons. Continuous persuasion with stake holders was done to ensure desirable compliance.

Following the state consensus meeting, the PIs of the respective states revised the contents of proforma based on discussions, collected and verified data and submitted the final version of the SMHA proforma along with the recommendations of the meeting. The final set of documents (duly completed NMHS MP 2015-16A 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. (Figure 12)

Figure 12: Overview of data collection process under NMHS MP 2015-16A



RESULT

State Mental Health System Assessment was done on 48, out of 51 districts of Madhya Pradesh. As per the methodology described in the earlier section, the SMHA was undertaken on 30 select parameters through quantitative and qualitative methods.

Thegeneral information related to population characteristics is summarized in Table 20, that depicts the overall macro level factors that are closely associated with and likely to influence the mental health of the state.

Table 15: General Information of Madhya Pradesh

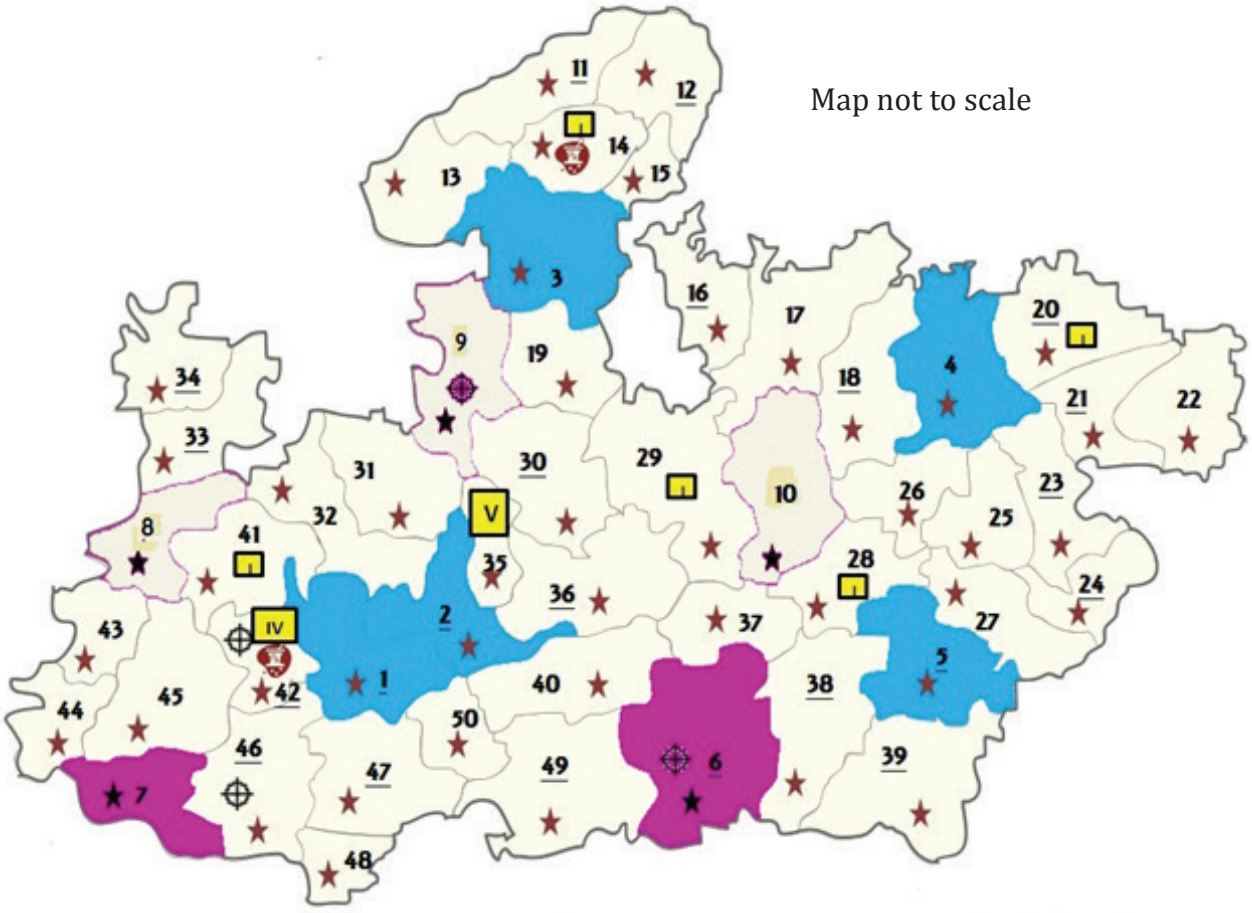
Total population	726,26,809
Main work force in (%)	31.2
Population in Urban areas in (%)	27.6
Tribal Population in the state in (%)	21.1
State GDP 2014-15	NA
Average GSDP 2010-11 to 2014-15	NA
Per Capita Income 2014-15	NA
Poverty	
Poverty Line (INR) rural	1118
Poverty Line (INR) urban	1170
Poverty Incidence (%)	37.09
Source: Census 2011	

Administrative Information of the State

Madhya Pradesh is one of the geographically largest state of India, currently has 51 districts, 342 Talukas/CDB and 55,101 villages. It has 6 towns with population between 1 lakh to one million and 4 cities with population between 1 million to 10 million. (Table 3)

The state has four urban metros and five districts which have been covered under District Mental Health Programme (DMHP) for more than five years another 2 districts have been covered under DMHP for less than 5 years. The state has 51 district hospitals, two mental hospitals and 14 Medical Colleges.

Figure 13: Map of Madhya Pradesh depicting health and mental health institutions in the state



		Number
	NMHS districts and Urban Metro	4
	Districts covered under DMHP > 5 years	5
	Districts covered under DMHP < 5 years	2
	District Hospital	51
	Mental Hospital	2
	Medical college hospital	14

**** Roman number in the box indicates number of medical colleges in each district*

Details of the districts

1) Dewas 2) Sehore 3) Shivpuri 4) Satna 5) Mandla 6) Chhindwara 7) Barwani 8) Ratlam 9) Guna 10) Damoh 11) Morena 12) Bhind 13) Sheopur 14) Gwalior 15) Datia 16) Tikamgarh 17) Chhatarpur 18) Panna 19) Ashok nagar 20) Rewa 21) Sidhi 22) Singroli 23) Shadol 24) Anuppur 25) Umaria 26) Katni 27) Dindori 28) Jabalpur 29) Sagar 30) Vidisha 31) Rgarh 32) Shajapur 33) Mandasaur 34) Neemuch 35) Bhopal 36) Raisen 37) Narsingpur 38) Seoni 39) Balaghat 40) Hoshangabad 41) Ujjain 42) Indore 43) Alirajpur 44) Jhabua 45) Dhar 46) Khargone 47) Khandwa 48) Burhanpur 49) Betul 50) Harda

Quantitative Indicators of State Mental Health System Assessment

The DMHP has been the implementation arm of the NMHP since 1996. However, only 14% districts have been covered under in the state. The general population covered by DMHP is 14% and tribal population covered by DMHP is only 19%. The number of core hospital based mental health facilities in the state per 1, 00,000 populations is near 0.03. Beds available for mental health in patient services is 1.18 beds per one lakh population. Only 12% of district / General hospitals are providing mental health services in the state. The CHC s and PHCs providing mental health services are 3 and 0.1% respectively.

Only 2 mental hospitals and 14 medical colleges provide mental health care in the state. A total of 124 health care professionals are available in the state per one lakh population. However, only 2 specialists and three MBBS Doctors are available to provide mental health services for one lakh population. The health care professionals who had undergone training in mental health in last three years is 99(i.e)0.1 per lakh population. The number of mental health professionals in the state was 0.2 per one lakh population. However, the proportion of psychiatrist was 0.05 per lakh population. The rehabilitation workers and special education teachers were not at all available.

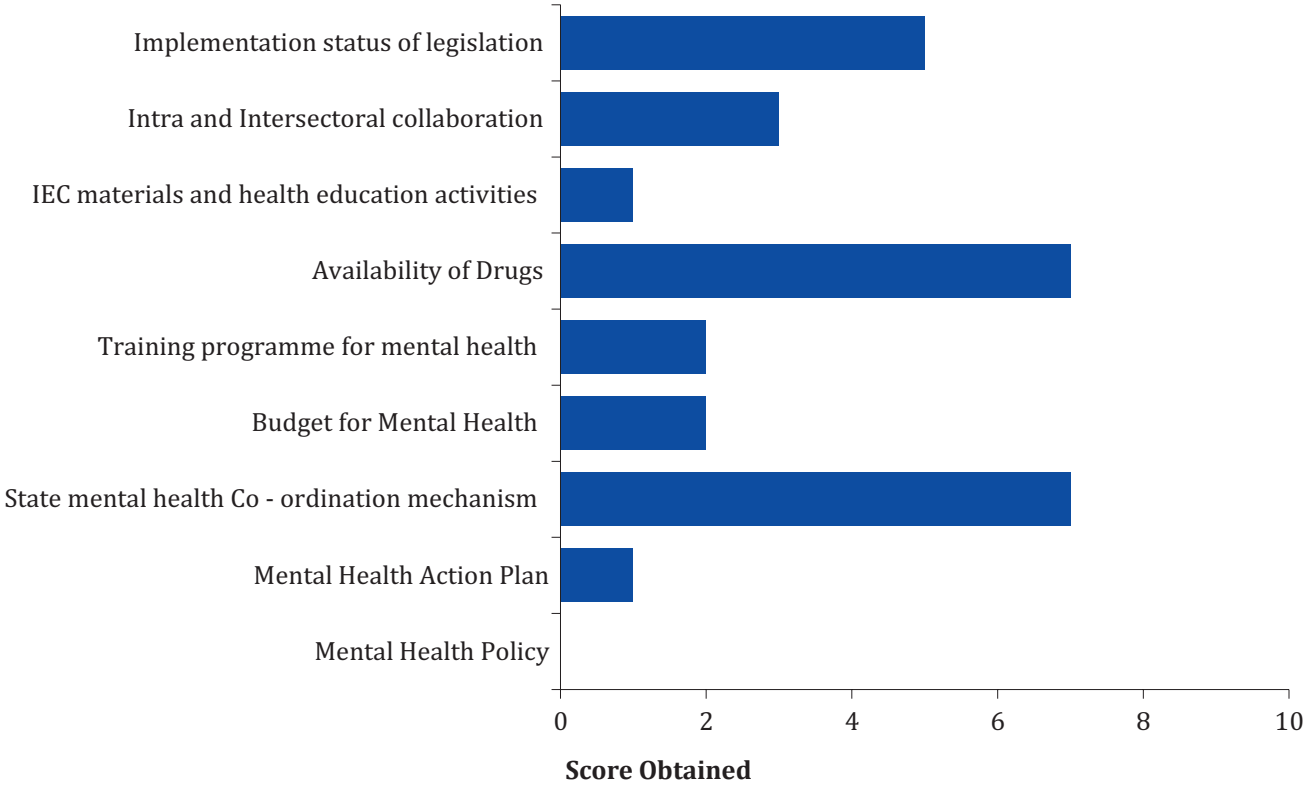
It was found that 91% of people with mental illness were not on the treatment in the state. The percentage of total budget allotted for mental health by state health department for the last financial year was measured to be 0.2%. However, the information regarding utilisation of this budget was not available.In Madhya Pradesh the number of suicides per one lakh population was 11.9 which is higher than the national suicide rate. The suicide incidence rate was high among 18 to 45 year age group which is in concordance with the national suicide rate.[18]

Quantitative Indicators of State Mental Health System Assessment

Among qualitative indicators of NMHS MP 2015-16A, the state obtained 7 out of 10 in

State mental health Co-ordination mechanism. In availability of drugs criteria also the state obtained 7 out of 10 score. However, in all the remaining criteria's the state has failed to achieve reasonable good status. The overall score of Madhya Pradesh in assessment of qualitative indicators for NMHS MP 2015-16A was 31 out of 100 which is lesser than national average. (Figure 14 and Annexure 7)

Figure 14: Qualitative Indicators of State Mental Health System Assessment



RECOMMENDATIONS

Currently in Madhya Pradesh an estimated 66 million people are in need of mental health interventions and care (both short term and long term). Considering the far reaching impact of mental health on all domains of life, across the age group, gender, and residential area, urgent actions are required. In addition to adults, the burden among children and adolescents (not included in this survey), thousands more are in need of Mental Health care in state.

It is understandable that there is no single solution that gives complete and / or quick remedies. Building strong health systems that integrate mental health with the larger public health system based on evidence based practices is the need of the hour. Most of the recommendations of National Mental Health Report also holds true for the state, however few state specific recommendations are under-mentioned.

1. State Specific Mental Health Bill

The national mental health policy may not be very applicable to the state in Toto where; infrastructure is very scarce and implementation of existing policy is poor. This is suggested by the unacceptably high treatment gap and the fact that the median duration of treatment even for those who were started on treatment was approximately one year. So, this is high time for the state to develop stand-alone state mental health policy with defined or specified goals, objectives and mechanisms, as the prevalence and dynamics of Mental Morbidities differ from other state. The policy should focus on the treatment, rehabilitation of those with mental illness and create awareness regarding mental health in the community keeping in mind the high prevalence of substance use disorder in the state.

2. Development Of Skilled Human Resource

Most of the public health institutions are devoid of skilled man power for providing mental health services to the patients. It is real challenge for the state to create or recruit these personnel in quick succession. The training of existing of manpower for basic level of competence to deal with mental health issues has been stated since last couple of years. It need to be scaled up, to cover the most of the Public Health Institutions of the state.

The availability of psychiatrists is least in the MP among the surveyed state under NMHS i.e.; 0.05 per lakh population. This number has fallen short of the recommended requirement of at least 1 psychiatrist per lakh population. This Paucity of mental health specialists continues to be worrying, considering the

fact that only few Medical Colleges of the state has MD/Diploma courses. So there is urgent need to increase the specialist seats in medical colleges as well as increase the seats of Psychologist and other paramedical courses related to mental health in Social and behaviour science colleges and paramedical workers training schools.

3. Integrated Quality Assured Mental Health Service Delivery:

Mental health programme at the state level are still stand alone programme; however, an assessment of available facilities, indicate the presence of a wide variety of institutions ranging from specialty hospitals to primary health centres, that can be engaged in the delivery of mental health care, both in the public and private sectors. Across the state, large number of private health care institutions and professionals are available in general and specialised care; however, their numbers, quality and activities are unclear and the role they could play is yet to be delineated. Public health system need be integrated with primary to tertiary level health care centres, medical colleges and private institution to deliver quality assured mental health services.

4. Improve The Institution Based Care For Mental Health

Despite the acceptance of the fact that primary and community care is the need of the hour, some patients need institutional mental health care and rehabilitative services. The existing facilities are inadequate and situated in urban areas and in few of Medical Colleges. Almost all the district hospitals are lacking services of functional psychiatric department. Existing man power need to be trained and facilities for inpatient services need to be started/ upgraded in order to provide mental health care to the patients at every district hospital.

5. Mental Health Financing Need To Be Streamlined

Financing is a pivotal and leveraging factor in translating mental health plans and policies to field level implementable programmes. There is no separate budget head for mental health in the state. The total budget available for mental health was less than 1% in the state. The financing of mental health care is in a state of total disarray, amidst the lack of clarity and shared responsibilities between central and state governments and several departments at the state level. The budgetary support for mental health related activities suffered from lack of activity specification, justification, timely allocation and difficulty in even utilising the available budget amidst human resource constraints.

6. Collaboration With Outside The Health Sector

The needs of persons with mental illnesses

are complex and cut across different sectors warranting the need for intra- and intersectoral coordination. Among all the states surveyed under NMHS, MP and Rajasthan were the states who scored least in Intra and Inter-sectorial collaboration for mental health. The collaboration of Mental Health Department with social welfare department, women & child development department, youth & sports department, Mass Media communication department and education department are important cogs in the wheel of effective prevention, management and rehabilitative services for Mental Health. Timely coordination of activities between the Centre –states–districts – departments- institutions peripheral agencies canavoid delays in early identification, management and rehabilitation of patients with Mental Morbidities. There has to be a designated nodal unit for mental health at the state & district level who can identify and engage the potential sectors for the collaboration.

7. Rehabilitation Programmes Need To Be Upgraded And Increased

Given the fact that 14% of the population above 18 years suffers from a mental health problem and nearly 50% of individuals affected with bipolar affective disorders, epilepsy, major depressive disorders and psychoses have moderate to severe disability, rehabilitation ought to be a part of the management strategy. However, the facilities like day care centres, half way homes, sheltered workshops, temporary stay facilities, etc. and mental health care personnel (social workers, counsellors, physiotherapists) were very limited in number and were mainly concentrated in cities or Medical colleges. Social welfare activities for mentally disabled persons were limited to the provision of disability certificates, pensions and job reservations and even these were limited. Reservation of jobs for mentally ill persons and the preferential allotment of housing were very less. Although, Mental Health NGOs are working in the state, but their impact at ground level is very minimal.

8. Upgrade/Establish The Services For The Substance Use Disorders

The prevalence of substance use disorder was very high with respect to the other states, surveyed under the NMHS. Among substances, Tobacco use disorder was found very high in the state. The immediate action plan need to address following points

a. The tobacco-cessation activities have to be functional in every public health institution i.e.; primary level health care workers along with ASHA's of the village need to be trained for delivering counselling services with regards to tobacco cessation activities.
b. The Medical Officers posted at periphery need to be trained for delivering tobacco cessation services like Counselling, and

prescribing pharmacological therapy including Nicotine Replacement Therapy.

c. The de-addiction centres must be operational at district hospitals, private hospitals and all the medical colleges.

d. The collaboration with the NGO's should be strengthened in order to roll out these services and BCC activities.

e. The community and family support is utmost important for these patients. The counselling services have to be extended to the family members of the patients also.

Considering the substance use disorders, it is a complex phenomenon; there are several macro & micro issues that determine the use of psychoactive substances in community. Stress relief, curiosity, recreation, lack of family support/ emotional support, family conflicts for youths and depression were some of the reasons brought out by the participants. Among substance use disorders, tobacco use disorders are highest in the state. The tobacco consumption in rural community is socially accepted and at some places local customs necessitates its consumption. The most affected population for tobacco use disorder were males, of age more than 40 years while for alcohol use disorder was common among males of age between 30 to 49 years and resident of urban non metro in the state. The long term action plan is needed to address following points

i. Creating awareness among school going children against substance use disorders can play a vital role in this regard. It will give a heavy blow to the problem of substance use disorder in the most cost effective manner. The school curriculum should incorporate "Essential Life Skills for adolescents" which can help them to cope up against various conditions like stress, conflicts and peer pressure that may lead to indulge them in substance use disorder/s in future as well as to make them aware of the adverse impacts of these disorders.

ii. The adult member of the community need to be made aware of the long term impacts of substance use disorders like tobacco. A locally relevant IEC materials need to be designed and appropriate method need to be chosen for their dissemination i.e.; posters, folk dance, pamphlets other mass media campaigns.

iii. The community leaders like members of Panchayat Raj Institution (PRI), teachers, ASHA, Health care workers and religious leaders need to be involved during mass media campaigns against substance use disorders especially tobacco use disorder.

iv. The involvement of NGOs can give the impetus for making community aware, strengthen the system and develop local innovation to cope up substance use disorders in the state.

v. In border districts of the state, by-products of opium and cannabis like Bhang, Sanan, Hashish, Ganja(Crude opium), were the main items of substance use disorders.

At many places it is cultivated illegally in kitchen garden and being consumed. The community consensus is required to curb these activities. The Gram Panchayat along with local administration can be made accountable to ensure that these activities couldn't take place at village level.

vi. In a recent decision of MP Govt., alcohol prohibition will be implemented in the entire state by closing all liquor shops in a phased manner. It is indeed a much needed & timely effortand definitely provide a beacon of hope to combatt the problem of alcohol use disorder in the state.

9. Regular Monitoring And Evaluation

Although Mental Morbidities is included in the existing routine HMIS in state but availability of data related to this is scarce and not reflecting the situation in reality. Ground staffs need to be aware, trained and encouraged to report the cases of Mental Morbidities so that programme managers can get quality data in real time to take evidence based decision rather than on the basis of gut feeling. Like few other states, MP should publish periodical reports specifically covering mental health activities from both the private and government sectors at least every year.

10. Mental Health Research Needs To Be Promoted

Research programmes focusing on mental health priorities are required to address knowledge gap. In most of the surveyed states, national or state research activities are largely missing. Research priorities need to be delineated by policy makers and experts supported by national and state agencies making use of the data in programme implementation. Apart from limited research in medical colleges, operational translational / implementation research was not present in most states, thus limiting various aspects of mental health growth.

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.

Few encouraging steps taken by the Madhya Pradesh state in an order to meet the Mental Health Care need of citizens;

- **The state has inaugurated the "Mann Kaksh" or the mental health cell in approximately every district hospital, in a bid to integrate mental health into routine primary health care. This initiative was termed SOHAM (Scaling up Opportunities for Healthy and Active Minds).**
- **Madhya Pradesh Government has set up 'Anand' Department which will coordinate among other departments and draft polices that would increase the level of happiness among its citizens.**
- **Among indicators of State Mental Health System Assessment (NMHS MP 2015-16A), the score of state was 7 out of 10 in State Mental Health Co-Ordination Mechanism and availability of drugs.**
- **Recent efforts to partial and phased alcohol ban i.e recently state Govt. has decided Alcohol prohibition will be implemented in the entire state by closing all liquor shops in a phased manner.estate.**

REFERENCES AND BIBLIOGRAPHY

1. Preamble to the Constitution of WHO as adopted by the International Health Conference, New York, 19 June - 22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of WHO, no. 2, p. 100) and entered into force on 7 April 1948.
2. Vos T, Barber RM, Bell B, Bertozzi-Villa A, Biryukov S, Bolliger I, et al. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. The Lancet. 2015;386(9995):743-800.
3. Gururaj G, Girish N, Issac MK,. Mental, neurological and substance abuse disorders: Strategies towards a systems approach. Burden of Disease in India 2005 [cited 2016 14 Dec]. Available from: http://cdrwww.who.int/entity/macrohealth/action/NCMH_Burden of disease.
4. World Health Organisation. The world health report 2001 — Mental health: new understanding, new hope. World Health Organisation, Geneva, 2001.
5. Ngo VK, Rubinstein A, Ganju V, Kanellis P, Loza N, Rabadan-Diehl C, et al. Grand challenges: integrating mental health care into the non-communicable disease agenda. PLoS medicine. 2013;10(5):e1001443.
6. Prince M, Patel V, Saxena S, Maj M, Maselko J, Phillips MR, et al. No health without mental health. The lancet. 2007;370(9590):859-77.
7. Keyes CL. The nexus of cardiovascular disease and depression revisited: The complete mental health perspective and the moderating role of age and gender. Aging & mental health. 2004;8(3):266-74.
8. Lund C, Breen A, Flisher AJ, Kakuma R, Corrigall J, Joska JA, et al. Poverty and common mental disorders in low and middle income countries: a systematic review. Social science & medicine. 2010;71(3):517-28.
9. State Health Policy for M.P: Directorate of Health Services Madhya Pradesh; [cited 2016 14 Dec]. Available from: http://www.health.mp.gov.in/healthpolicy.HTM.
10. Chadda R, Agarwal V, Singh MC, Raheja D. Help seeking behaviour of psychiatric patients before seeking care at a mental hospital. The International journal of social psychiatry. 2000;47(4):71-8.

11. Lahariya C, Singhal S, Gupta S, Mishra A. Pathway of care among psychiatric patients attending a mental health institution in central India. Indian journal of psychiatry. 2010;52(4):333.
12. Rajdan R, Jagawat T, Joshi S, Sharma R. District Mental Health Programme in India-Shivpuri District, Madhya Pradesh. Delhi Psychiatry J. 2009;12(2):202-5.
13. Shidhaye R, Shrivastava S, Murhar V, Samudre S, Ahuja S, Ramaswamy R, et al. Development and piloting of a plan for integrating mental health in primary care in Sehore district, Madhya Pradesh, India. The British journal of psychiatry : the journal of mental science. 2016 Jan;208 Suppl 56:s13-20. PubMed PMID: 26447172. Pubmed Central PMCID: 4698552.
14. Census of India 2011New Delhi: Office of Registrar General of India; 2001 [cited 2016 01 Oct]. Available from: http://censusindia.gov.in/2011-prov-results/prov_data_products_MP.html.
15. Lund C, Tomlinson M, De Silva M, Fekadu A, Shidhaye R, Jordans M, et al. PRIME: a programme to reduce the treatment gap for mental disorders in five low- and middle-income countries. PLoS medicine. 2012;9(12):e1001359. PubMed PMID: 23300387. Pubmed Central PMCID: 3531506.
16. Breuer E, De Silva MJ, Fekadu A, Luitel NP, Murhar V, Nakku J, et al. Using workshops to develop theories of change in five low and middle income countries: lessons from the programme for improving mental health care (PRIME). International journal of mental health systems. 2014;8(1):1.
17. Makan A, Fekadu A, Murhar V, Luitel N, Kathree T, Ssebunya J, et al. Stakeholder analysis of the Programme for Improving Mental health carE (PRIME): baseline findings. Int J Ment Health Syst. 2015;9:27. PubMed PMID: 26155307. Pubmed Central PMCID: 4493963.
18. National Institute of Mental Health and NeuroSciences. National Mental Health Survey of India, 2015-16. Secondary National Mental Health Survey of India, 2015-16 2017. [cited201712April].Available from: http://www.nimhans.ac.in/sites/default/files/u197/National%20Mental%20Health%20Survey%20-2015-16%20Summary_0.pdf.
19. Anand K, Jain S, Paul E, Srivastava A, Sahariah SA, Kapoor SK. Development of a Validated Clinical Case Definition of Generalized Tonic–Clonic Seizures for Use by Community-based Health Care Providers. Epilepsia. 2005;46(5):743-50.
20. Prokhorov AV, Pallonen UE, Fava JL, Ding L, Niaura R. Measuring nicotine dependence among high-risk adolescent smokers. Addictive behaviors. 1996;21(1):117-27.

21. Gater R, Sousa DBAE, Barrientos G, Caraveo J, Chandrashekar C, Dhadphale M, et al. The pathways to psychiatric care: a cross-cultural study. Psychological medicine. 1991;21(03):761-74.

22. Üstün TB, Chatterji S, Kostanjsek N, Rehm J, Kennedy C, Epping-Jordan J, et al. Developing the World Health Organization disability assessment schedule 2.0. Bull of the World Health Organ. 2010;88(11):815-23.

23. Senkubuge F, Modisenyane M, Bishaw T. Strengthening health systems by health sector reforms. Global health action. 2014;7:23568. PubMed PMID: 24560261. Pubmed Central PMCID: 4651248.

24. World Health Organization. World Health Organization assessment instrument for mental health systems-WHO-AIMS version 2.2 Geneva2005. Available from: http://apps.who.int/iris/bitstream/10665/70771/1/WHO_MSD_MER_05.2_eng.pdf.

25. World Health Organization. WHO's Mental Health Atlas 2014. Geneva: 2015.

ANNEXURES

Annexur-1:

Table 1: Overview of Training of various stakeholders of NMHS MP 2015-16, Madhya Pradesh

Stage / Week	Focus of training / Activity	Expected outcome
Stage 1: Week 1	**ORIENTATION AND SENSITISATION** Understanding mental health problems and their presentation and Orientation to NMHS and familiarity with methods and NMHS tools	The reasons for doing NMHS and its importance Study sites and different instruments being used in the survey and the purpose of each one Overall survey technique, procedures to be followed. Ethical, cultural and gender-related issues
Stage 2: Week 2	**OBSERVATION AND DISCUSSION** Observation of psychiatric interviews in the clinic or hospital as conducted by a trained mental health professional and case discussion	Observed10 interviews in a routine clinical setting (at least 2 per day) Discussed details of all the observed cases and their presentation Learnt specific interview skills, familiarized themselves with skills required for conducting interviews Became comfortable with the interview process, terms and nomenclature used Understood the method of use of tablets
Stage 3: Week 3	**DEMONSTRATION** Demonstration of administering NMHS instruments in the hospital Attempt NMHS interviews	Administer the NMHS instruments, specifically MINI Ask questions appropriately, elaborate as necessary, frame and reframe questions within the boundaries of the MINI and other survey instruments Witnessed demonstration of 15 NMHS interviews with focus on MINI Observed simulated interviews being done on 5 volunteers by other FDCs and do 1 interview (simulated interview) on volunteers. Also become familiar in using tablets for NMHS

Stage 4: Week 4	**ADMINISTERING NMHS INSTRUMENTS** FDC would learn to administer NMHS instruments on both persons with and without mental illness	Gain an understanding of the NMHS interviews in more detail. Able to critique the 'partner's' interview objectively, while offering solutions Interact with patients and 'non-patients' in an appropriate and respectful manner and learn interview skills. Able to conduct the NMHS interview using tablets. Each FDCs should have done 2 supervised interviews and witnessed 15 supervised interviews. Each FDCs should have done 5 unsupervised interviews.
Stage 5: Week 5	**GAINING PROFICIENCY IN INTERVIEWS** Acquiring proficiency in administering NMHS instruments and being evaluated for the skills	Gain sufficient ability to independently conduct NMHS interviews in the hospital setting. Each FDCs should have done in all 15 independent interviews and 2 of these interviews (One case and other normal / person without mental illness) been evaluated at least once by the NMHS State Team member.
Stage 6: Week 6	**ADMINISTERING MINI and MINI KID** Acquiring skills in interviewing adolescents and administering MINI Kid	Each FDC would have 6 completed interviews on MINI-KID (4 with patients and 2 with non-patients / normal / healthy volunteers). Gained proficiency in administering the MINI Kid module of the NMHS instruments.
Stage 7: Week 7	**TRAINING IN THE COMMUNITY** Administration of NMHS instrument in the community	FDC is able to administer the NMHS instruments in the field. Each FDC would have completed 15(3 interviews per day) interviews in the community.
Stage 8: Week 8	**MICROPLANNING MONITORING AND SUPERVISION** Identify HH within clusters, and individuals within the HH, Initiating interview, and continued training to ensure completion of an interview including declaring non-responders and filling up of monitoring formats.	FDC will gain enough competency to complete the NMHS interview in the field and report the field survey activities and fill up the daily monitoring formats and other field survey records

The 6th week of training was for the four states where adolescent survey was being conducted; other states directly went onto the next stage of community based training for NMHS

Annexure - 2

Table: Summary of records maintained at different levels

Category of NMHS study team	Types of records maintained	Focus of the form and person responsible for checking it.	Frequency of maintenance
Field Data Collectors (FDC)	Form 1	Details of each and every contact made during the day of survey and checked by the study coordinator.	Daily
	Form 2	Summary of the day's field work and checked by the study coordinator.	Daily
FDC supervisor /Study coordinator	Form 1 A	Details of re-interviews and checked by state NMHS team	After conducting re-interviews (usually daily)
	Form 3A	Summary details of all the FDC's daily activity and verified by the state team.	Daily
	Form 3B	Summary details of all the FDC's weekly activity and verified by the state team.	Weekly
	Form 4 A	Summary details of survey in one cluster and scrutinised by the state team and NIMHANS NMHS team.	After completing survey in one cluster
State NMHS team	Form 4 B	Summary details of survey in one district and is scrutinised by NIMHANS NMHS team.	After completing survey in one district
	Form 1 A	Records details of re-interviews.	After conducting re-interviews (usually fortnightly)
NIMHANS NMHS team	Institution approvals, Ethics committee approval, training related documents, Checklist for monitoring survey across all study sites and consolidated report of fortnightly review meetings.		

Annexure - 3

Table 3 : Availability of Mental Health Care facilities in state

Health care facilities in the state	Per lakh population	Number available
Govt. Super specialty hospitals	0.00	1
Govt. Medical college hospitals	0.01	7
Govt. District hospitals	0.07	50
Govt. Sub district/ Taluka hospitals	0.09	66
Govt. Community health centers	0.46	334
Govt. Primary health centers	1.61	1171
Govt. Sub centers	12.66	9192
Govt. Dispensaries	2.95	2142
Govt. AYUSH hospitals	0.05	38
Govt. AYUSH dispensaries	3.23	2344
Govt. ESI/CGHS Hospitals	0.01	8
Govt. Others (specify)	0.01	4
Total Health care facilities in Govt. sector	**21.15**	**15357**
Private Super specialty hospitals	0.00	2
Private Medical College Hospital(s)	0.01	6
Private hospitals	0.21	156
Private Nursing Homes	0.32	235
Private Registered Clinics	1.68	1222
Private Non allopathic Hospitals	NA	206
Others (Private)	0.00	2
Total Health care facilities in Private sector	**2.52**	**1829**

Annexure - 4

Quantitative indicators (SET-A)

Domain 1	Coverage of DMHP (District Mental Health Programme)		
1.1	i. Number of districts where DMHP is started during the 12th plan period (2012 to 2017) in the state.		2
	ii. Number of districts where DMHP was started earlier to 2012in the state.		5
1.2	Percentage of districts in the state covered by DMHP		13.7
1.3	Percentage of state population covered by DMHP		14.2
1.4	Percentage of tribal population covered by DMHP		19.05
Domain 2	**Mental Health Services**		
2.1	Number of core hospital-based mental health facilities in the state per 100000 population		0.03
2.1.1	Number of beds available for mental health inpatient services in the state per 100 000 population		1.18
2.2	Percentage of District/General hospitals in the state providing mental health services		11.8
2.3	Percentage of Taluka hospitals in the state providing mental health services		3.03
2.4	Percentage of PHCs in the state providing mental health services		0.1
Domain 3	**Mental Health Care Facilities**		
3.1	Number of Mental health facilities in the state per 100000 population (for each category)	Per lakh population	Number available
	1. Mental hospitals	0.003	2
	2. Medical colleges with psychiatric department	0.019	14
	3. General hospitals with psychiatric units	0.008	6
	4. Mobile mental health units	0	0
	5. Day care Centre	0.003	2
	6. De-addiction units / Centres	0.010	7

	7. Residential half way homes	0	0
	8. Long stay homes	0	0
	9. Hostel (quarter stay homes)	0	0
	10. Vocational Training centres	0.003	2
	11. Sheltered workshops	0	0
Domain 4	**Human Resources for Mental health**		
4.1	Number of any health professionals/ personnel available in the state per 100000 population	123.6	89797
4.1.1	Number of health professionals/personnel available in the state per 100000 population for each category		
	1. Doctors – Specialists (any type)	2	1685
	2. Doctors – MBBS	3	2368
	3. AYUSH doctors	0.4	280
	4. Nurses	5	3629
	5. Pharmacists	1	1023
	6. ANMs / Health worker	23	16707
	7. ASHA / USHAs	88.3	64105
4.1.2	Percentage of health professionals/personnel in the state who have undergone training in mental health in the last 3 years	0.11	99
4.1.3	Percentage of health professionals/personnel in the state trained in mental health in the last 3 years for each category		
	1. Doctors – Specialists (any type)	NA	NA
	2. Doctors – MBBS	0%	0
	3. AYUSH doctors	0%	0
	4. Nurses	3%	99
	5. Pharmacists	0%	0

	6. ANMs / Health worker	0%	0
	7. ASHA / USHAs	0	0
		Per lakh population	**Number available**
4.2	Number of Mental health professionals/ personnel in the state per 100 000 population	0.2	148
4.2.1	Number of Mental health professionals/ personnel per 100000 population (for each category)		
	1. Psychiatrists	0.05	37
	2. Medical doctors trained in mental health	0	0
	3. Clinical psychologists and counsellors	0.01	5
	4. Nurses trained in mental health/Nurses with DPN qualification	0.14	99
	5. Psychiatric Social workers	0.01	7
	6. Rehabilitation workers and Special Education teachers	0	0
	7. Professional and paraprofessional psychosocial counsellors	0	0
4.3	Number of health professionals/personnel trained in or working for mental health in the state per 100 000 population	0.2	148
4.3.1	Percentage of Taluka hospitals in the state having at least one doctor trained in mental health		3
4.3.2	Percentage of PHCs in the state having at least one doctor trained in mental health		0.1
Domain 5	**Treatment Gap**		
5.1	Percentage of people with Mental illness who are not on treatment in the state		90.69

Domain 6	Mental Health Financing	
6.1	Total health budget of the state for the year in the last financial year in INR	26508021988
6.2	Total budget allotted for mental health by state health department for the last financial year in INR	58240000
6.3	Percentage of total health budget allotted for mental health by state health department for the last financial year	0.2
6.4	Percentage of total allotted mental health budget that is utilized	NA

Domain 7	Suicide	Madhya Pradesh	India
7.1	Number of suicides per 100000 population	11.9	10.6
7.1.2	Suicide incidence rate in the state for different age groups (for the year 2014)		
	i. <14 years	0.6	0.5
	ii. 14 and above-below 18 years	15	9.5
	iii. 18 and above-below 30 years	24.5	17.2
	iv. 30 and above-below 45 years	18	17.2
	v. 45 and above-below 60 years	14.3	15.7
	vi. 60 years and above	7.6	9.4
7.1.3	Suicide incidence rate in the state for male and female (for the year 2014)		
	i. Male	14.2	14.3
	ii. Female	10.6	7.2

Annexure - 5

Table : Available Mental Health Care Facilities in the state

Health care facilities in the state	Per lakh population	Number available
Govt. Super specialty hospitals	0.00	1
Govt. Medical college hospitals	0.01	7
Govt. District hospitals	0.07	50
Govt. Sub district/ Taluka hospitals	0.09	66
Govt. Community health centers	0.46	334
Govt. Primary health centers	1.61	1171
Govt. Sub centers	12.66	9192
Govt. Dispensaries	2.95	2142
Govt. AYUSH hospitals	0.05	38
Govt. AYUSH dispensaries	3.23	2344
Govt. ESI/CGHS Hospitals	0.01	8
Govt. Others (specify)	0.01	4
Total Health care facilities in Govt. sector	**21.15**	**15357**
Private Super specialty hospitals	0.00	2
Private Medical College Hospital(s)	0.01	6
Private hospitals	0.21	156
Private Nursing Homes	0.32	235
Private Registered Clinics	1.68	1222
Private Non allopathic Hospitals	NA	206
Others (Private)	0.00	2
Total Health care facilities in Private sector	**2.52**	**1829**

Annexure - 6

Qualitative Indicators (SET-B)

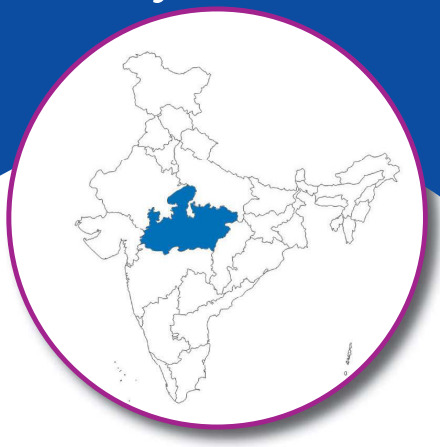
Sl.No	Indicators	Maximum score	Score assigned
QL 01	Mental Health Policy	10	NK
QL 02	Mental Health Action Plan	10	1
QL 03	State mental health Co-ordination mechanism	10	7
QL 04	Budget for Mental Health	10	2
QL 05	Training programme for mental health	10	2
QL 06	Availability of Drugs	10	7
QL 07	IEC materials and health education activities	10	1
QL 08	Intra and Intersectoral collaboration	10	3
QL 09	Monitoring	10	3
QL 10	Implementation status of legislation	10	5
	Total	**100**	**31**

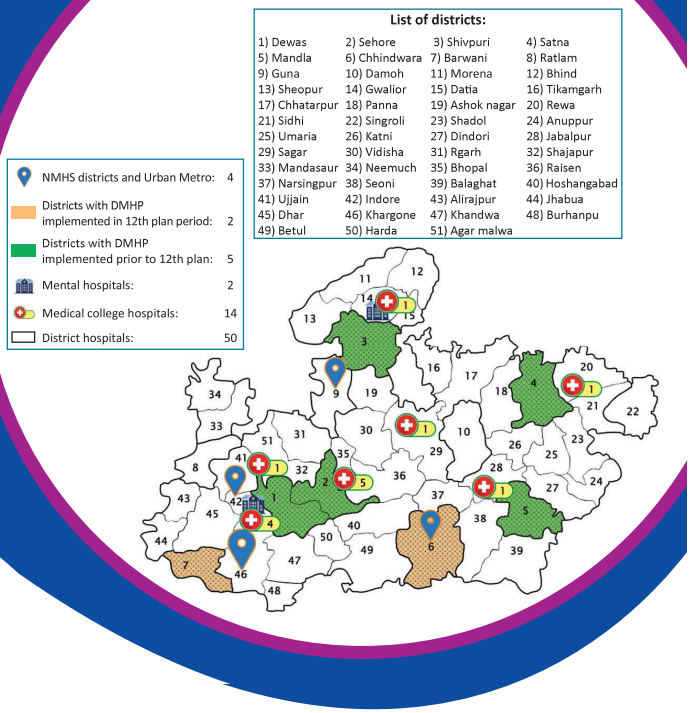
Footnote : NK Not known

Annexure - 7

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%

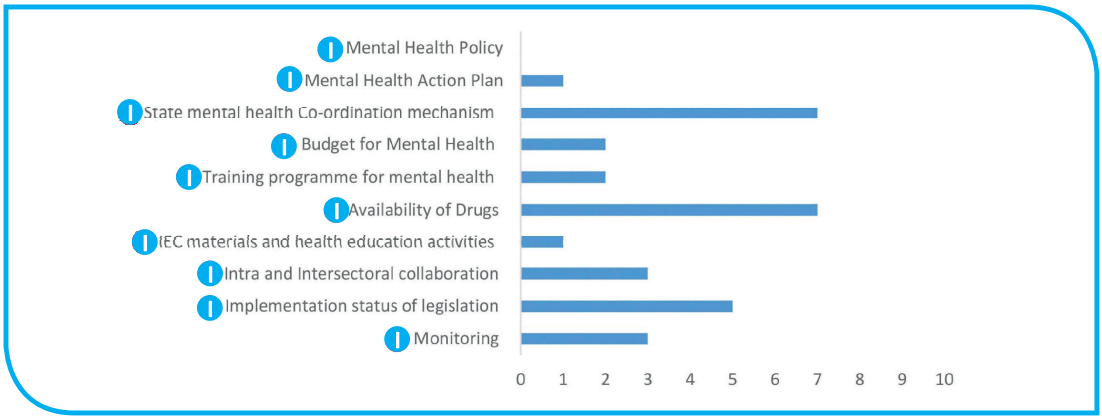
10. Suicide rate (Per 1,00,000 population)	Madhya Pradesh	India
1. Overall suicide rate (I)	11.9	10.6
2. Suicide rate for male and female		
i. Male	14.20	14.30
ii. Female	10.56	7.24
3. Suicide rate for different age groups		
i. <14 years	0.64	0.50
ii. 14 and above-below 18 years	14.97	9.52
iii. 18 and 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 (I)	13.5%	91.4%
Severe mental disorders (I)	0.4%	57.1%
Alcohol use disorder (I)	10.3%	94.3%
Depressive disorder (I)	1.4%	80.0%
High suicidal risk (I)	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.

(I) **Indicator.**