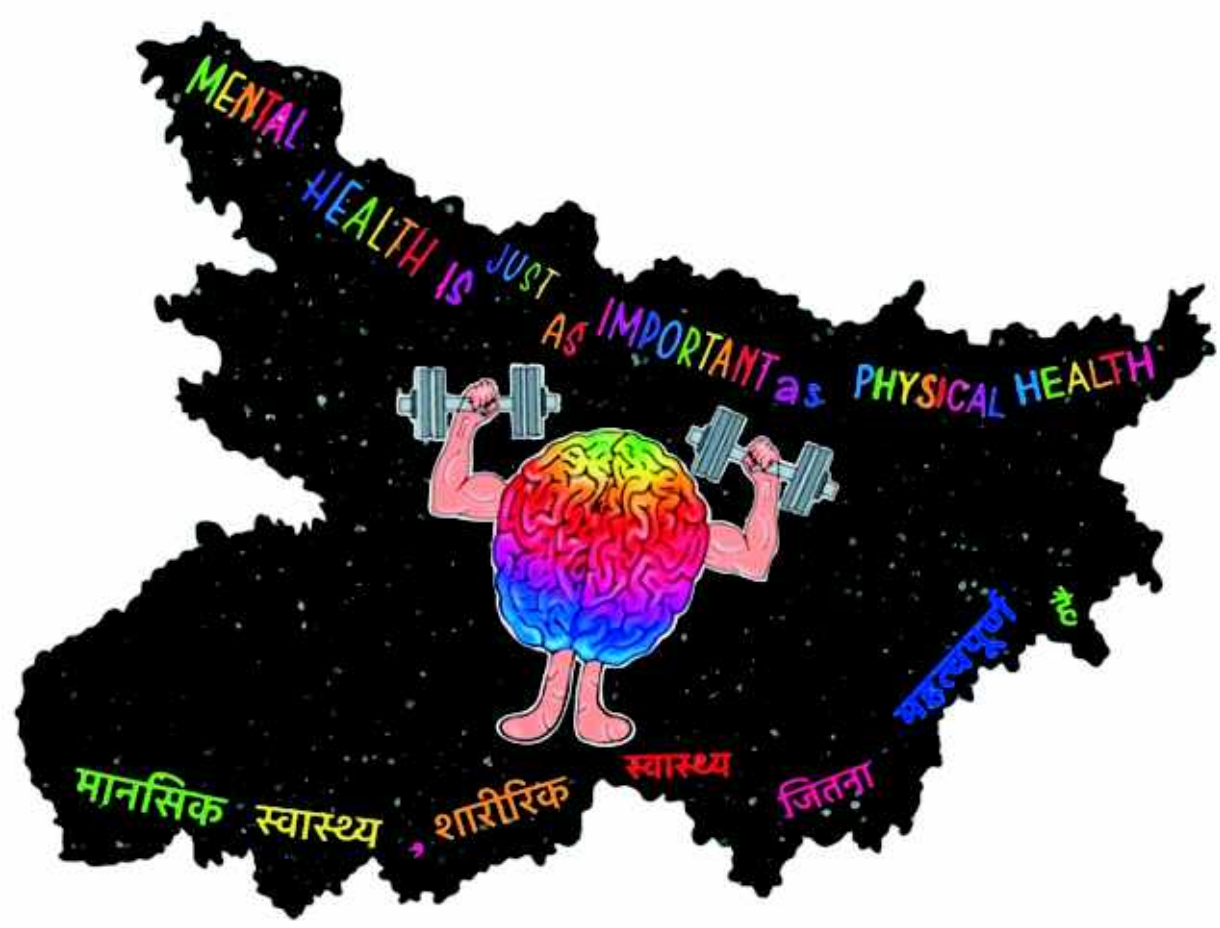
MENTAL HEALTH SYSTEM ASSESSMENT IN THE STATE OF BIHAR



The Centre for Health Policy
Asian Development Research Institute

MENTAL HEALTH SYSTEM ASSESSMENT IN THE STATE OF BIHAR

January, 2020

Apurva Srishti Imrie
Dr. Rajesh Kumar

The Centre for Health Policy
Asian Development Research Institute

Suggested Citation
Imrie A.S., Kumar R. (2020). Mental Health System Assessment in the state of Bihar. Monograph 01/20. The Centre for Health Policy, Patna, Bihar.

Authors
Apurva Srishti Imrie (Corresponding Author)
Legal Specialist
The Centre for Health Policy, Asian Development Research Institute (ADRI), Patna
Email: apurva.chp@adriindia.org

Rajesh Kumar
Professor and Head of the Department of Psychiatry
Indira Gandhi Institute of Medical Sciences (IGIMS), Patna
Email: kartavyarajesh2003@gmail.com

Cover Design
Tanya Taneesha

Publisher
The Centre for Health Policy
Asian Development Research Institute (ADRI)
BSIDC Colony, Off Boring-Patliputra Road
Patna - 800013 (BIHAR)
Phone: 0612-2575649
Fax: 0612-2577102
Website: www.adriindia.org/chp

Printed by
Tarang Press & Publications Pvt. Ltd.
Shivpuri, Patna - 800023

Funding Source
This work is supported by a grant from the Bill and Melinda Gates Foundation.

Acknowledgement
The authors are grateful to the Department of Mental Health and Substance Abuse, World Health Organisation for grant of permission to use the WHO-AIMS version 2.0 for this study. The authors acknowledge the role of Mr. Shagnik Saha in the development of study design and methodology and the role of Dr. Shikha Kukreti in the primary data collection process. The authors are appreciative for the comments and suggestions provided by Dr. Prabhat P. Ghosh and Dr. Shaibal Gupta from ADRI. The authors are also grateful for the support of Mr. Rajesh Jha, Executive Director of the Centre for Health Policy and Mr. Debarshi Bhattacharya of the Bill and Melinda Gates Foundation.

TABLE OF CONTENTS

ABBREVIATIONS

ANM	Auxiliary Nurse Midwife
BIMHAS	Bihar Institute of Mental Health and Applied Sciences
BMSICL	Bihar Medical Services & Infrastructure Corporation Limited
BSEDL	Bihar State Essential Drug List
CHC	Community Healthcare Centres
COPD	Chronic Obstructive Pulmonary Disease
CMD	Common Mental Disorders
CMHA	Central Mental Health Authority
CJD	Creutzfeldt-Jacob Disease
DOH	Department of Health
DMHP	District Mental Health Programme
GOI	Government of India
GOB	Government of Bihar
GMCH	Government Medical College and Hospital
GSDP	Gross State Domestic Product
ICPS	Integrated Child Development Service Directorate
ICP	Individual Care Plan
IRDA	Insurance Regulatory and Development Authority of India
JJ Act	Juvenile Justice (Care and Protection of Children) Act2016
JJ Rules	Juvenile Justice (Care and Protection of Children) Rules 2017
MNS	Mental Neurological and Substance Use Disorders
MHA	Mental Healthcare Act 2017
MHE	Mental Healthcare Establishment
MHRB	Mental Health Review Board
MHS	Mental Health System
MHP	Mental Health Professional
NHRC	National Human Rights Commission
NMHP	National Mental Health Policy 2014
NMHP	National Mental Health Programme 1982
NCD	Non-communicable Diseases
NGO	Non-governmental Organization

NMHS	National Mental Health Survey 2015-16
OOPE	Out of Pocket Expenditure
OPMI	Orphaned Persons with Mental Illness
PHC	Primary Healthcare Centres
PHI	Public Healthcare Institution
RDPA	Rights of Persons with Disability Act 2016
SC	Sub-centres
SCPS	State Child Protection Society
SHRC	State Human Rights Commission
SMHA	State Mental Health Authority
SMHF	State Mental Health Fund
SSDD	Social Security and Disability Directorate
SWI	Social Welfare Institution
WDC	Women Development Corporation, Government of Bihar
WHO	World Health Organization
WHO-AIMS	World Health Organisation-Assessment Instrument Mental Health Systems
YLLs	Years of Life Lost
YLDs	Years Lived with Disability

INTRODUCTION

India has a long way to go in fulfilling its commitments under the Sustainable Development Goals 2015. The eastern state of Bihar has a very important role to play in the country's course towards achieving its goals of reduction in poverty and gender inequality, increase in access to justice, improvement in overall health outcomes and provision of universal health coverage. Any effort towards improving the population health and reducing health inequities requires a special focus on mental health, as good mental health is integral to human health and well-being. To this end, the Government of India (GOI) enacted the Mental Healthcare Act2017 (MHA) and the Rights of Persons with Disabilities Act2016 (RPDA) in view of its international obligations under the United Nations Convention on the Rights of Persons with Disability (UNCRPD). These new laws have led to new legal obligations for Bihar, specifically in respect of population mental health and disability, and have to be formally adopted by legislation and executed, by the state.

The RPDA defines disability to include long-term physical, mental, intellectual and sensory impairments. The MHA broadens the understanding on mental health to include the mental well-being of an individual and not merely indicate the absence of any mental illness or Mental Neurological and Substance use (MNS) disorders. It recognizes how mental health is shaped to a great extent by individual, household and environmental factors. Systemic inequalities associated with factors such as gender, age, ethnicity, income, education, socio-economic status and area of residence serve as social determinants of MNS disorders– demonstrating how they result from a complex interplay between individuals and the environment they live in. For example, there is substantial evidence indicating that the poor or disadvantaged suffer disproportionately more from common mental disorders (CMD) and their adverse consequences. [1]Low education attainment, food insecurity, unemployment and gender have been found to be associated with a higher risk of CMDs. [2]For persons of old age, social isolation is one of the biggest risk factors for the onset of CMDs. [3]In this regard, a life course approach to mental health in the state allows us to focus on how these environmental and biological factors interact to produce mental disorders and other health problems across different stages of an individual's life. This approach has gained even more importance in respect of mental health, as it has led to the emergence of increasing evidence on how mental disorders previously perceived to manifest in adulthood may have their origins in early stages of life.

According to WHO, in any given year about 20 percent of adolescents are estimated to experience a mental health problem, most commonly depression or anxiety. [4]Exposure to socio-economic adversity at

---

[1] Gururaj G, et al. National Mental Health Survey of India, 2015-16: Summary. Bengaluru, National Institute of Mental Health and Neuro Sciences, NIMHANS Publication No. 128, 2016; Mumford DB, Saeed K, Ahmad I, Latif S, Mubbashar M. Stress and psychiatric disorder in rural Punjab. A community survey. British Journal of Psychiatry 1997;170:473-8; Sundar M. Suicide in farmers in India. British Journal of Psychiatry 1999;175:585-6; Patel V. Poverty, inequality and mental health in developing countries. In: Leon D, Walt G, editors. Poverty, inequality and health. Oxford: Oxford University Press; 2001. p. 247-62.

[2] Patel V et al. Gender Disadvantage and Reproductive Health Risk Factors for Common Mental Disorders in Women. Arch Gen Psychiatry. 2006;63:404-413; Gururaj G, et al. National Mental Health Survey of India, 2015-16: Summary. Bengaluru, National Institute of Mental Health and Neuro Sciences, NIMHANS Publication No. 128, 2016.

[3] World Health Organization, Secretariat for the Development of a Comprehensive Mental Health Action Plan, August 27, 2012. Risks to mental health: an overview of vulnerabilities and risk factors. https://www.who.int/mental_health/mhgap/risks_to_mental_health_EN_27_08_12.pdf.

[4] World Health Organization. Fact sheet on Adolescent Mental Health. (September 18th, 2018). https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health.

a young age is a high-risk factor for development of mental disorders among this age-group. The young population (10-24 years) forms a major percentage of the state's population and investment in their mental health can have profound implications for the overall development of the state. Especially, as prioritization of adolescents as a target group for mental health interventions not only provides an opportunity to address the mental health needs of this group and minimize immediate risks to their health and well-being, but it can have far-reaching consequences for their future adult life and even for future generations. For instance, behaviourial risk factors that are associated with the emergence of different non-communicable diseases (NCD) can be addressed during adolescence, if appropriate attention is given to their mental health, even when dealing with their physical health.

NCD sare the leading cause of mortality in the state, with Ischemic Heart Disease, Chronic Obstructive Pulmonary Disease and Lower Respiratory Infections being among the top 6 causes of years of life lost (YLLs) for both males and females in the state. [5]MNS disorders that also fall under the umbrella of NCDs, are closely linked as *precursor risks*, *comorbid conditions* and *outcomes* of several other NCDs, which means that the presence of MNS disorders can itself be a risk factor that leads to other NCDs, or it can be a consequence of another NCD, or it can simply co-exist with another illness or disease, and ultimately contribute a substantial share to the total disease burden. [6]In light of such evidence, the relationship between MNS disorders and other NCDs associated with high disease burden in the state, such as, Cancer, Cardiovascular Diseases, Chronic Respiratory Diseases, Diabetes, Digestive disorders, Endocrine disorders, Liver diseases and Musculoskeletal disorders, needs to be further explored. In respect of prevalence of mental disorders in Bihar, evidence suggests that there is a high disease burden associated with common mental disorders in the state, as Depression and Anxiety disorders are among the top ten causes of years lived with disability (YLDs) in Bihar.[7]

Various epidemiological studies conducted on MNS disorders in India report varying prevalence rates for different MNS disorders. [8]According to the most recent figures by the National Mental Health Survey (NMHS 2015-16) conducted across 12 states in India, the overall weighted prevalence of mental morbidity (excluding tobacco use disorders) was 10.6 percent (current) and 13.7 percent (lifetime) at the national level. This translates into around 150 million Indians (above 18 years) in need of active mental health interventions on a short-term or a long-term basis. [9]While there is hardly any current state-specific data available on prevalence of MNS disorders in Bihar, according to the Census (2011), around 0.03 percent of the total population of the state has some form of mental illness. The young population (10-19 years) constituted 20.8 percent of the total population with mental illness in the state. However, these figures on total population in Bihar with mental illness seem to be unreliable because the category 'other' used for Census (2011) captures cases 'where it cannot be ascertained by the field investigator whether the individual is suffering from mental illness or mental disability, or multiple disability'. Around 18.5

[5] Indian Council of Medical Research, Public Health Foundation of India, and Institute for Health Metrics and Evaluation. (2017) India: Health of the Nation's States - Level Disease Burden Initiative. New Delhi, India: ICMR, PHFI and IHME; 2017.

[6] Stein, Dan J et al. Integrating mental health with other non-communicable diseases.BMJClinical research ed. vol. 364 l295. 28 Jan. 2019, doi:10.1136/bmj.l295.

[7] Supra note 4.

[8] Math SB, Srinivasaraju R. Indian Psychiatric epidemiological studies: Learning from the past. Indian J Psychiatry. 2010;52(Suppl 1):S95–S103. doi:10.4103/0019-5545.69220.

[9] Gururaj G, et al. National Mental Health Survey of India, 2015-16: Summary. Bengaluru, National Institute of Mental Health and Neuro Sciences, NIMHANS Publication No. 128, 2016.

percent of the total population surveyed have been reported under this category, which can be indicative of a higher prevalence of morbidity and co-morbidity associated with MNS disorders.

Specifically, in respect of the younger population, a state-wide survey conducted among adolescents of Bihar called UDYAYA, provides estimates on common mental disorders, suicidality and substance-use among young and older adolescents. [10]According to this survey, 7 percent of married girls (15-19 years) and 5 percent of unmarried girls (15-19 years) showed symptoms of severe depression, while 7 percent of married girls (15-19 years) and 3 percent of unmarried girls (15-19 years) had contemplated suicide. Adolescent girls in the state are at risk for developing MNS disorders, as a result of prevalence of gender-specific risk factors that can negatively impact a female's mental health and well-being. Sex inequality within society is associated with factors such as patriarchal norms that support the subordinate status of women, prevalence of gender-based roles, income inequality and high rates of gender-based violence as experienced by nearly 43.2 percent of currently/ever married women in Bihar. [11]Experience of domestic violence, social exclusion, along with other socio-economic stresses is likely to increase a female's vulnerability to mental morbidities.

Individuals of all age-groups in the state with mental health conditions, including severe mental disorders like schizophrenia, bipolar disorder; common mental disorders like depression and anxiety; and, intellectual disabilities or neurological development disorders, constitute a vulnerable group among themselves. On the other hand, certain vulnerable groups including homeless persons, trafficked children and adults, commercial sex workers and individuals with HIV/AIDS and other chronic illnesses are at a higher risk of developing mental disorders. [12]Persons within custodial institutions, orphaned persons with MNS disorders (OPMI), children of persons with mental health problems, elderly care-givers, internally displaced persons, persons affected by natural disasters (flood and drought) and emergencies, and other marginalized populations with their special conditions and needs, bear a disproportionate and higher burden of mental health problems in Bihar.[13]

MNS disorders have substantial physical, social and economic consequences for individuals suffering from these conditions. Persons diagnosed with any mental health condition are likely to experience disabilities resulting from the impairment of mental or emotional functions which significantly interferes with the performance of major life activities, such as, learning, working, and communicating with others. They face significant barriers which inhibit their effective participation in society on an equal basis with others. Both, the patient and the care-giver's social life, employment and even the ability to conduct daily activities can get severely affected because of the presence of MNS disorders. Especially, mood effective disorders, psychotic disorders, developmental disorders and intellectual disability are associated with high care-giver burden. As reported by the NMHS (2015-16), the disability proportion across the different domains (work, social and family life) can be significantly high among individuals with epilepsy (68.1-72.3%), depressive disorder (67.3-70.2%), bipolar affective disorders (59.3-63%) and schizophrenia and

---

[10] Santhya, K. G., R. Acharya, N. Pandey et al. 2017. Understanding the lives of adolescents and young adults (UDAYA) in Bihar, India, Executive Summary. New Delhi: Population Council.

[11] Government of India, Ministry of Health and Family Welfare. (2015-16). "National Family Health Survey- District Level Household Survey-Bihar". http://rchiips.org/nfhs/pdf/nfhs4/br_factsheet.pdf;; Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. Lancet. 2002;360:1083-1088.

[12] Government of India, Ministry of Health and Family Welfare. (2014). "National Mental Health Policy". https://www.nhp.gov.in/sites/default/files/pdf/national%20mental%20health%20policy%20of%20india%202014.pdf.

[13] Ibid.

other psychotic disorders (53.4-59.5%), which depicts how disability experience correlates with the severity of mental disorders. According to this survey findings, individuals with depressive disorders and bipolar affective disorders on an average were unable to carry out their daily activities for 20 days in the previous one month. Individuals diagnosed with schizophrenia and other psychotic disorders experienced such difficulties for 15 days, within the same time-period. The NMHS has also flagged, high out-of-pocket expenditure on care and treatment of MNS disorders, as a cause of serious concern, especially in light of the reciprocal relationship between poverty and MNS disorders. Such high out-of-pocket expenditure includes medical treatment costs and expenses on cultural and religious practices associated with the treatment of MNS disorders. Additionally, these adverse conditions and consequences can be further aggravated because of the unavailability of mental health treatment, rehabilitation and reintegration facilities.

Mental health needs to be prioritized by the state because the detrimental impact of MNS disorders is not only experienced at individual and household levels, as highlighted above, but it poses enormous economic challenges to the state, in the form of diminished productivity at work, reduced rates of labour participation, forgone tax receipts, and increased health and welfare expenditures. [14]These detrimental consequences experienced in the state can be addressed through strong policy initiatives that prioritize mental health within the domain of public health expenditure and other social welfare measures. While planning state policy measures for mental health, a systems perspective can provide a broader framework for healthcare which serves better integration of the already available services and improves the uptake of care for persons with mental health problems. The World Health Organization (WHO) defines a mental health system as all activities whose primary purpose is to promote, restore or maintain mental health which includes all organizations and resources focused on improving mental health. A good mental health system has the responsibility of reducing substantial burden of untreated mental disorders, decreasing human rights violations, ensuring social protection and improving the quality of life, especially of the most vulnerable and marginalized sub-groups in society. The approach should be to move beyond the mental health system's primary role of providing care and include and integrate mental health promotion and rehabilitation components.

However, for any informed state action for strengthening the existing mental health system of Bihar, the available information is limited, and with existing gaps and inconsistencies. To address this knowledge gap, an assessment of the key components of Bihar's mental health system was undertaken. The objective was to identify major weaknesses and shed light on the existing capacity of the system to cope with the disease burden associated with MNS disorders in the state and enable a response, infused with solutions aimed at strengthening the system.

[14] Dan Chisholm et all; Scaling-up treatment of depression and anxiety: a global return on investment analysis ? ¡Lancet Psychiatry (2016); 3: 415–24.

CONTEXTUALIZING THE STUDY

Demography

Bihar is located in the eastern region of India. It is a land-locked state and shares its borders with: Nepal in the north, West Bengal in the east, Jharkhand in the south and Uttar Pradesh in the west end. The state land is divided into two unequal halves (North Bihar and South Bihar) by the river Ganges which flows through the middle of the state, from the west to the east side. For the purpose of administration, it is divided into 38 districts, 101 sub-divisions and 534 blocks. In 2011 it was the most densely populated state in India, with the third highest concentration of population of 104.1 million (Census 2011), of which 48 percent were female and 52 percent male. The total population of the state in 2018 is estimated to be about 122 million, with no less than 88.7 percent residing in rural areas. The age structure of the state's population is much 'younger' as compared to India, with a higher proportion of infants and children, followed by adolescent and youth. It is estimated that 42 percent of the total population is below 15 and 4 percent are 65 or older.

The level of urbanization in Bihar is around 11.3 percent as compared to a much higher level of urbanization rate experienced in India (31.2 percent). According to the National Family Health Survey (NFHS)-4 for 2015-16, only 16 percent of the households in Bihar have a 'pucca' house (high-quality materials throughout, including roof, walls, and floor), while more than 50 percent of the houses are 'kachcha' (made from mud, thatch, or other low-quality materials). Only 59 percent of all households have electricity, with availability being much higher in urban areas (88.2 percent) as compared to rural (54.1 percent). As high as 66.5 percent of households do not use a sanitation facility and in place, practice open defecation. This practice is more common among rural households (73 percent) than urban households (22 percent). Almost all (98 percent) households use an improved source of drinking water, but only 4 percent have piped water in their dwelling, yard, or plot.

State Economy

Agriculture is a major contributor in the state's economy, as around 74 percent of the workforce in Bihar depend on agricultural and allied activities as their means of livelihood. However, the tertiary sector accounts for 62.3 percent of Bihar's economy, followed by the Primary Sector (20.2 percent) and the Secondary Sector (17.5 percent). Per Capita GSDP in 2017- 18 was Rs. 42,242 (current prices) and Rs. 31,316 (constant prices). Total expenditure on social services for the financial year 2017-18 was Rs. 50028 crores, out of which Rs. 6182 crores was spent on public health and family welfare. [15]In the year 2018-19 total expenditure on social services increased to Rs. 72101 crores, out of which Rs. 7564 crores was spent on public health and family welfare. [16]During 2013-18, the per capita expenditure on social services increased from Rs. 2596 to Rs. 4199 and per capita expenditure on medical and public health increased from Rs. 237 to Rs. 621.[17]

---

[15] Department of Finance, Government of Bihar. Economic Survey of India (2018-19); Page 73.

[16] Ibid

[17] Ibid

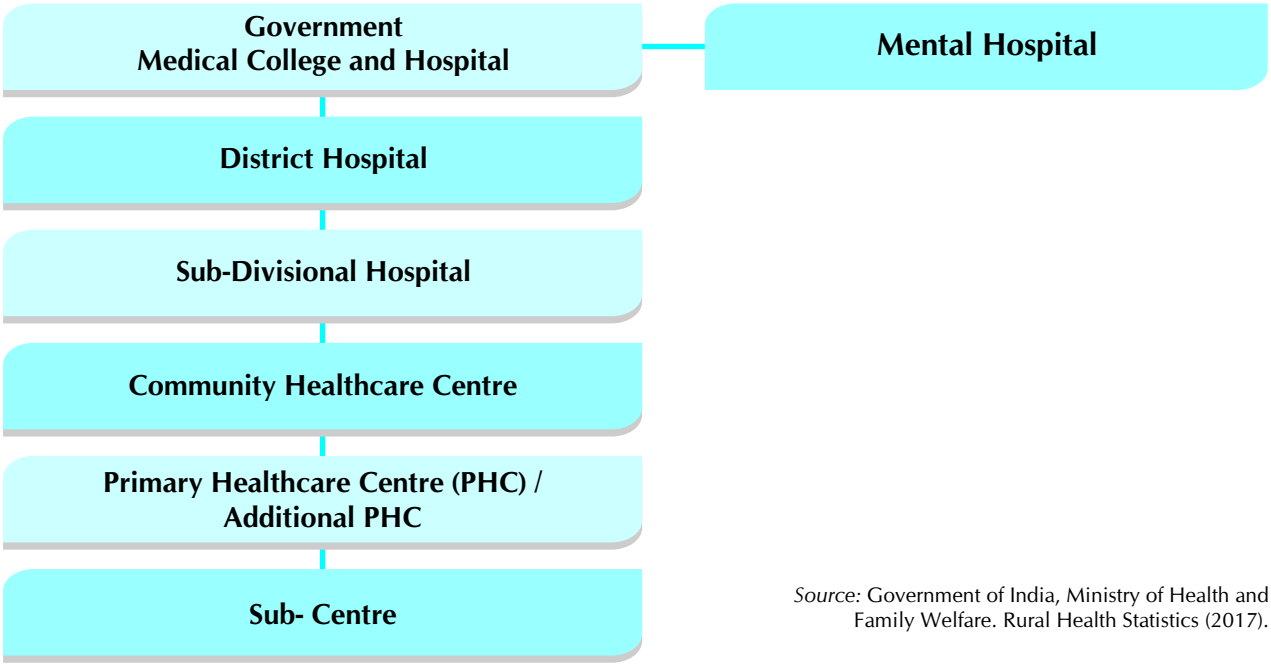
Epidemiology

According to the study by Indian Council for Medical Research (ICMR), communicable, maternal, neonatal, and nutritional diseases contribute 42.6 percent, non-communicable diseases contribute 47.6 percent and injuries contribute 9.8 percent to the total disease burden in Bihar. [18]Some of the leading causes of death and disability combined, in 2016, in the state was Diarrhoeal diseases, Ischemic heart disease, Lower respiratory infections, Iron-deficiency anaemia, Chronic obstructive pulmonary disease (COPD), pre-termbirth complications, congenital birth defects, and other neo-natal disorders. [19]The top ten risk factors which drive both death and disability include malnutrition, air pollution, water and sanitation, dietary risks, high blood pressure, tobacco use, high cholesterol, occupational risks and alcohol and drug use.[20]

Health sector

The Department of Health (DOH), Government of Bihar (GOB)is a major provider of health services to the general population and it regulates professionals and institutions delivering healthcare in the state. The Directorate of Health Services, the Bihar State Health Society, the Bihar Swasthya Suraksha Samitiand the Bihar Medical Services & Infrastructure Corporation Limited (BMSICL) operate under the DOH to ensure delivery of healthcare services at public healthcare institutions (PHIs) or government-run healthcare facilities. These government departments or agencies are responsible for the implementation of various state and national schemes/programmes that seek to provide affordable and accessible healthcare services for communicable and non-communicable diseases at PHIs as depicted in Figure 1 below.

Figure 1. Public Healthcare Institutional network in Bihar



Source: Government of India, Ministry of Health and Family Welfare. Rural Health Statistics (2017).

[18] Indian Council of Medical Research, Public Health Foundation of India, and Institute for Health Metrics and Evaluation. (2017) India: Health of the Nation's States - Level Disease Burden Initiative. New Delhi, India: ICMR, PHFI and IHME; 2017.
[19] Ibid
[20] Ibid

As part of its rural healthcare network, PHIs include 9949 Sub-centres, 1899 Primary Healthcare Centres, 150 Community Healthcare Centres, 55 Sub-divisional Hospitals and 38 District Hospitals. [21]The Sub-centres and Primary Healthcare Centres are expected to operate as the primary tier of the healthcare delivery system, while the Sub-Divisional Hospitals at the sub-district level along-with the CHCs operating at the block level form the secondary tier of the system. Due to weak institutions at the primary tier, the secondary tier of the system ends up delivering primary healthcare services to the state's population.

District Hospitals and Medical Colleges and Hospitals which are expected to operate as the tertiary level of the healthcare delivery system also bear a substantial burden to deliver primary and secondary healthcare services, along-with specialized or tertiary care.

The Government Medical College and Hospitals provide medical education and specialized healthcare services in the urban areas of the state. A substantial portion of the rural population travels long distances to avail healthcare services at these facilities. Other specialized healthcare institutions such as a Mental Hospital is also run by the DoH. The Mental Hospital, which is known as the Bihar State Institute of Mental and Allied Sciences (BIMHAS), is the major provider of mental healthcare outpatient and inpatient services in the state. Additionally, it also provides legal aid for persons with mental health problems and their care givers.

Psychiatry departments at the Government Medical College and Hospitals and District Mental Health Programme Centres, that are located at District Hospitals, are other PHIs that provide mental healthcare services to the state's population.

Social Welfare (Protection and Care) Sector

The Social Welfare Department works for the protection, care and upliftment of women, children, old age persons, differently abled individuals and other vulnerable sections of society. It comprises the Social Welfare Directorate, Integrated Child Development Service Directorate (ICPS) and Social Security and Disability Directorate (SSDD).

The State Child Protection Society (SCPS) operates under the Social Welfare Directorate. The Women Development Corporation (WDC),the State Commission for Persons with Disability, and the State Society for Ultra Poor Social Welfare operate as independent entities, executing their functions under the aegis of the Social Welfare Department. In total there are 17 types of Social Welfare Institutions (SWIs) in the state, through which the Social Welfare Department provides services for care and protection to vulnerable groups in society.

The target population that they cater to includes children and women who are abandoned or in distress, elderly citizens, persons with physical and mental disability, homeless persons and persons in beggary. Different categories of SWIs provide access to different kind of services including residential facilities, food, clothing and other basic amenities, as well as, healthcare and rehabilitation services. These SWIs are run by the government or government-aided NGOs.

[21]Government of India, Ministry of Health and Family Welfare. Rural Health Statistics (2017).

Figure 2. Various Social Welfare Institutions operating under the Social Welfare Department, Government of Bihar

S.No	Applicable Laws/ Scheme/Guideline	Type of Institution	Total Number	Target Population
1.	The Juvenile Justice (Care and Protection of Children) Act 2015; Integrated Child Protection Scheme	Specialized Adoption Agency	26	Abandoned, surrendered or missing children (0-6 years)
2.		Children Home (Girls)	11	Children who are abandoned, surrendered, or otherwise in need of care & protection (7-18 years)
3.		Children Home (Boys)	22	Children who are abandoned, surrendered, or otherwise in need of care & protection (7-18 years)
4.		Open Shelter	9	Children who are abandoned, surrendered, or otherwise in need of care & protection (7-18 years)
5.		Observation Home (Boys)	14	Juveniles in conflict with law, pending enquiry
6.		Special Home (Boys)	1	Juveniles who have been convicted
7.		Uttar Raksha Grih (Girls)	1	Juveniles in conflict with law, convicted juveniles, women with mental health problems
8.	The Protection of Women from Domestic Violence Act 2005; The Immoral Traffic (Prevention) Act 1956; Mukhyamantri Naari Shakti Yojna	Short Stay Home	22	Female victims of human trafficking, sexual exploitation, domestic violence, or any other form of violence
9.	Sahara Yojana	Old Age Home	5	Elderly population
10.	Chaman Yojana	School for Children with Mental Retardation	2	Children with mental disability

S.no	Applicable Laws/ Scheme/Guideline	Type of Institution	Total Number	Target Population
11.	Special Schools Programme	State School for the Blind	3	Children with vision impairment
12.	Special Schools Programme	State School for Deaf and Dumb	5	Children with hearing or speech impairment
13.	Mukhyamanti Bhikshavritti Nivaran Yojana	Shanti Kutir	5	Destitute or homeless men
14.		SewaKutir	5	Destitute or homeless women
15.		Kaushal Kutir (Rehabilitation training centre)	1	Individuals in beggary, Destitute or homeless men and women
16.		Basera (Individual)	1	Homeless men
17.		Basera (Family)	1	Homeless families

SWIs under the Juvenile Justice (Care and Protection of Children) Act 2015 (hereinafter JJ Act) including, Children Homes, Observation Homes, Open Shelter and Special Homes are required to provide health services to children and adolescents who reside in these institutions. The Juvenile Justice (Care and Protection of Children) Rules 2017 (herein after JJ Rules) notified by the state government of Bihar, lays down guidelines for kinds of health and social welfare services that are to be made available by these SWIs for the rehabilitation and reintegration of young people falling under the purview of the JJ Act. The JJ Act and Rules mandate special assistance for children and adolescents with special physical and mental health needs, including mental health interventions such as counselling. It further provides for establishment of separate unit within the facility for children with special needs.

The Mukhyamantri Bhikshavritti Nivaran Yojana, that governs rehabilitation homes for homeless persons and persons in beggary, requires mental health services to be provided to the beneficiaries along with physical health check-ups and treatment. The Sahara Yojana requires similar health services to be provided to residents at old age homes. Schools for differently abled children, whether residential or day care, are also obligated to provide mental health services to their beneficiaries under the Rights of Persons with Disabilities Act2016 (RPDA). The Immoral Traffic (Prevention) Act 1956, the Protection of Women from Domestic Violence Act 2005and the corresponding rules, lay down similar provisions that require mental healthcare services to be delivered at all available short stay homes.

SCOPE OF THE STUDY& RESEARCH METHODOLOGY

Scope of the Study and Research Limitations

The organizations and resources employed in the mental health sector in Bihar can be broadly classified into public and private. There are no NGOs in the state that are employed specifically in this sector. The research framework adopted for this study focuses on the Mental Health System (MHS) of Bihar as a whole, which includes government-owned, funded or partly funded facilities/ departments/ boards/ committees/ agencies/ corporations or any other organiazation whose primary or secondary purpose is to improve mental health. In respect of institutions delivering mental healthcare and treatment in Bihar, because of the technical difficulties in accessing data of private healthcare facilities delivering care, the framework has been restricted to include only public healthcare facilities delivering care.

Research Question and Objectives of the study

The study sought to answer the following research question: what is the current status of the MHS of Bihar and what are the gaps and weaknesses that need to be addressed to strengthen the MHS of Bihar? The broad objectives of the study included:

A. To assess the MHS of Bihar in respect of the following domains: Policy and Legislative framework, Mental Health Services, Infrastructure and Human resource; Mental Health in Primary Healthcare, Public Education and Link with other sectors; and, Monitoring and Research practices.

B. To ascertain the level of implementation of the Mental Healthcare Act 2017/ Rights of Persons with Disabilities Act 2016/National Human Rights Commission directives/ Medical Council of India guidelines/ District Mental Health Programme, infrastructural, human resource, practice guidelines in respect of mental healthcare at various levels of the PHIs.

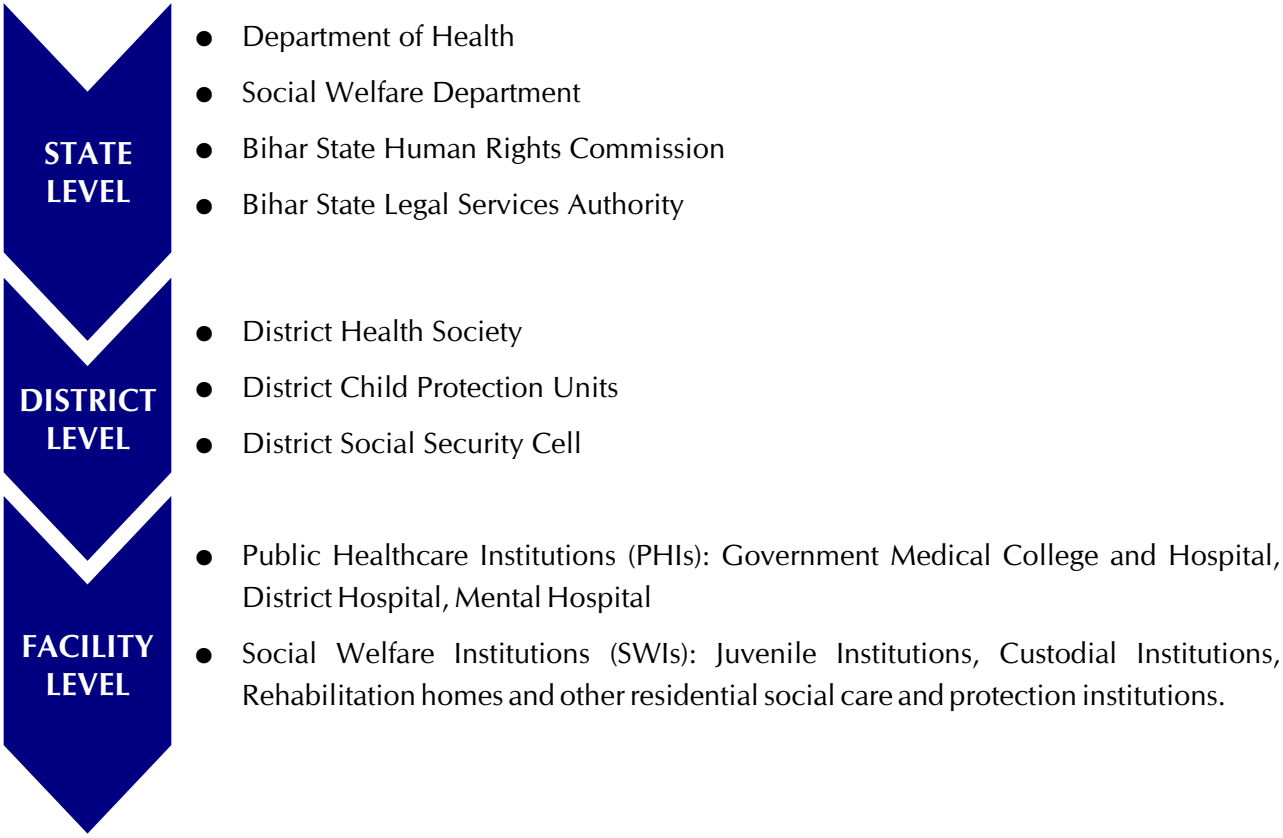
C. To ascertain the level of implementation of the infrastructural, human resource, practice guidelines of the laws, rules and schemes at various levels of the SWIs.

D. To propose action points for addressing the gaps and weaknesses in the PMHS of Bihar.

Research Methodology

The current study employed a quantitative methods-driven research design in order to effectively capture the major weaknesses and shed light on the existing capacity of the PMHS to cope with the prevalent burden of MNS disorders. The World Health Organisation-Assessment Instrument Mental Health Systems (WHO-AIMS 2.0) was employed for designing the study. Both, primary and secondary data was accessed. Data was collected at three levels of the MHS: state, district and facility, as depicted in Figure 3 below.

Figure 3. Data sources accessed at different levels of the Mental Health System of Bihar

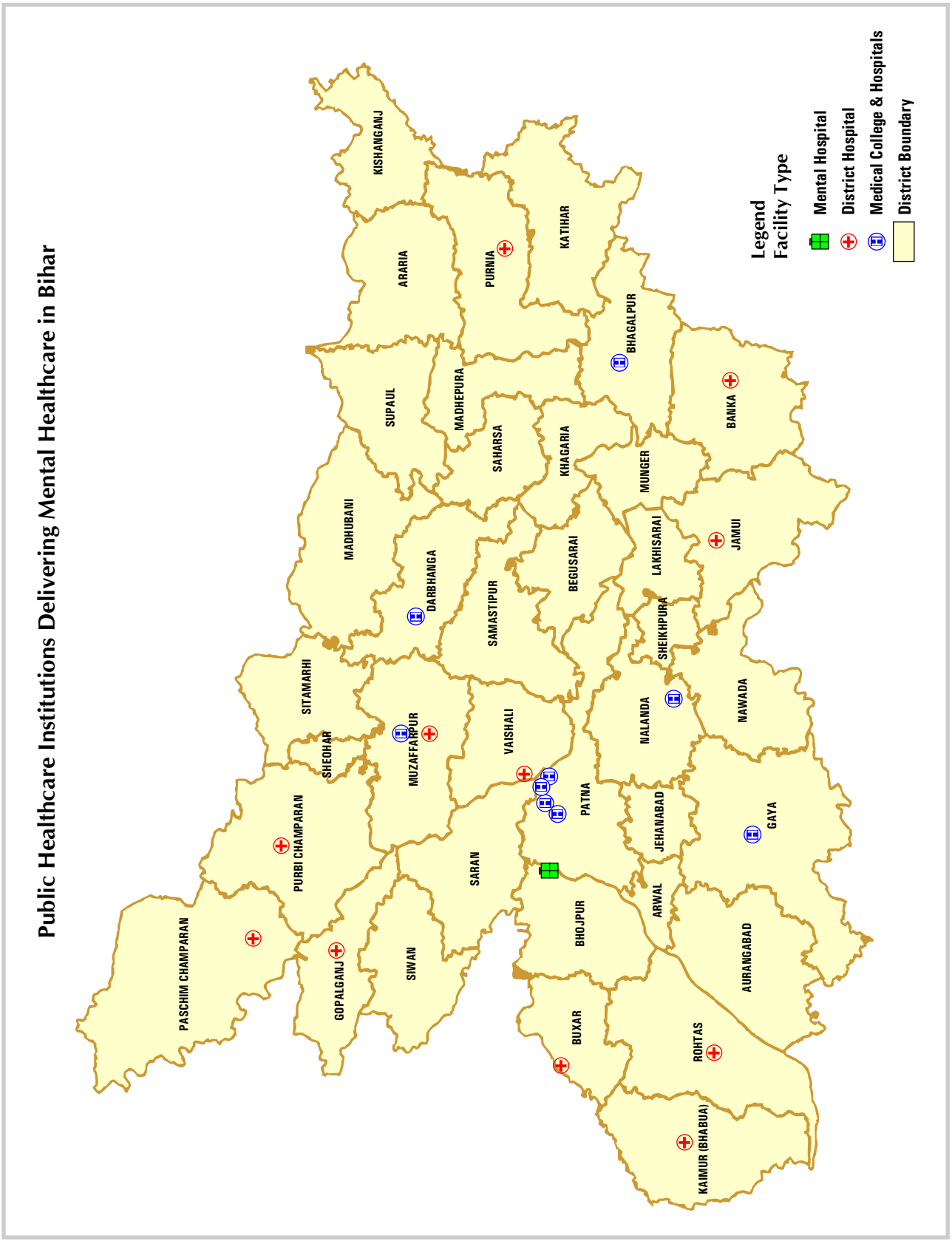


At the state and district levels, various government departments and agencies were approached for information on various aspects of the state's mental health system, including mental health policy, plan and legislation; monitoring human rights implementation; financing of mental health; delivery of mental health services; human resources employed in mental health; consumer and family associations for mental health in the state; mental healthcare of prisoners and other vulnerable groups; social welfare benefits and rehabilitation services for persons with mental health conditions; monitoring and research in mental health. Most of these themes were also part of the facility-level data collection from PHIs that deliver any form of healthcare including mental healthcare and SWIs dealing with vulnerable populations. SWIs have been considered to be a part of the PMHS mainly because even though it is not the primary purpose of SWIs to provide mental health services, they are required to have the said services for the vulnerable populations that they cater to. Furthermore, according to national and state guidelines, since the majority of the SWIs offer residential services, they are required to have in-house counsellors.

Sampling

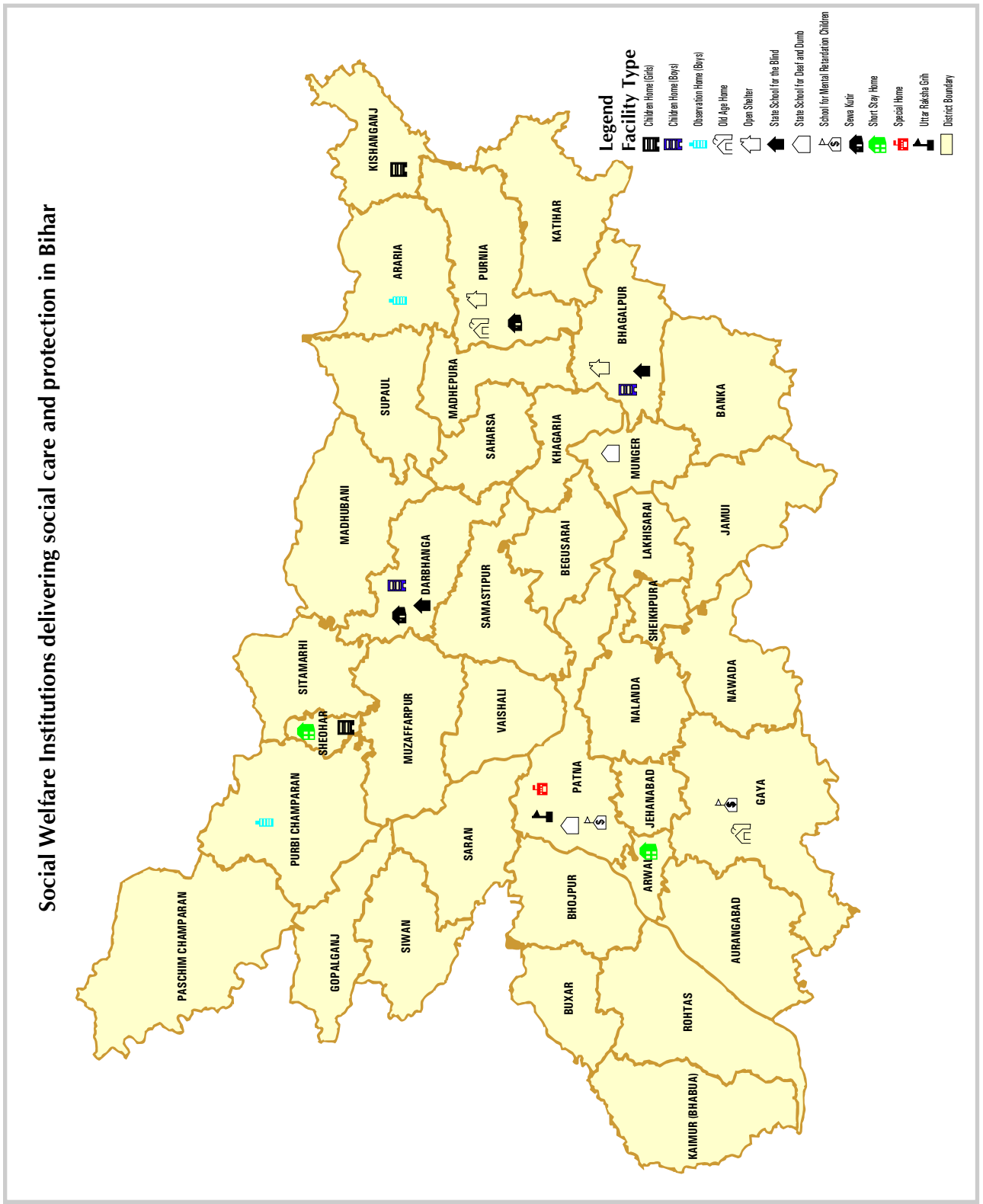
As depicted in Figure 4 below, a total of 21 PHI sites fulfilled the requirements for the study as these are the only PHI sites where mental healthcare services are available. These PHIs can be classified into three categories: Mental Hospital, Government Medical College & Hospitals, and District Mental Health Programme Centres at District Hospitals.

Figure 4. Total number of Government Healthcare Facilities that provide Mental Healthcare



For SWIs, a total of 27 sites were compiled by randomly selecting a minimum of two or one site (based on availability) from each of the 16 categories of available SWIs, as depicted in Figures5 and 6.

Figure 5. Total number of Social Welfare Institution sites visited for the study



Post sampling, the following categories of SWIs were found to have been completely closed down: Kaushal Kutir, Sewa Kutir, Basera (Individual) and Basera (Family), and only 1 SWI under the Shanti Kutir category was found to be operative. Finally, a total of 22 SWI sites were visited along with 21 PHI sites, as depicted in Figure 6, below.

Figure 6. Public Healthcare Institutions and Social Welfare Institutions sampled for the Facility-level Survey

Type	Sub Type	No. of Sites	No. of Sites to be Selected	Person of Interest
PHI	Mental Hospital (MH)	1	1	Mental Health Professional (MHP)
	Government Medical College & Hospital (GMCH)	9	9	MHP
	District Hospital (DH)/District Mental Health Programme Centre (DMHP)	11	11	MHP
SWI				
	Open Shelter (OS)	9	2	Person in-charge
	Children Home (Boys) (CH-B)	19	2	Person in-charge
	Children Home (Girls) (CH-G)	9	2	Person in-charge
	Observation Home (OH-B)	11	2	Person in-charge
	Special Home (SH)	1	1	Person in-charge
	Short Stay Home (Women) (SSH-G)	21	2	Person in-charge
	SewaKutir	5	Facility closed down	Person in-charge
	Shanti Kutir	5	1	Person in-charge
	Basera (I)	1	Facility closed down	Person in-charge
	Basera (Family)	1	Facility closed down	Person in-charge
	Kaushal Kutir	1	Facility closed down	Person in-charge
	Old Age Home	5	2	Person in-charge
	School for Children with Mental Retardation	2	2	Person in-charge
	State School for the Blind	3	2	Person in-charge
	State School for Deaf and Dumb	5	2	Person in-charge
	Uttar Raksha Grih/State Home for Protection of Women	1	1	Person in-charge
	TOTAL	**120**	**43**	

Research Instruments

The formation of a simplified questionnaire is supported by WHO-AIMS, which was used for developing all data collection tools to be administered at state, district and facility levels of the MHS. Additionally, for the facility survey at PHIs, the infrastructural, human resource and practice guidelines of the District Mental Health Programme (DMHP), Medical Council of India, the National Human Rights Commission and the Supreme Court of India were utilized to develop separate survey tools for the three categories of PHIs: mental hospital, psychiatry department at Government Medical College and Hospitals and District Mental Health Programme Centres at District Hospitals. However, for the development of the facility survey tool to be administered at SWIs, a different procedure was adopted. This was because there are many kinds of SWIs and each category of SWIs is governed by different laws and schemes. In the absence of a uniform set of guidelines or rules that all SWIs must subscribe to, it became difficult to evaluate their status and functioning. To solve this situation, the Delphi Method was utilized.

As part of the Delphi Method, the researchers first read through all available documentations, including laws, schemes and orders available in the public domain regarding all categories of SWIs, and then constructed a comprehensive list of domains or areas of importance. This list, consisting of all possible domains mentioned across all laws and schemes regarding different kinds of institutions, was then forwarded to five experts individually, requesting them to send in their feedback as to which domains should apply to all SWIs. Once the feedback from the experts were received, they were tabulated into one document, after anonymizing the responses, it was sent back to the experts to allow them reconsider their position in light of the other responses. After several iterations, a common list of domains was formed, based on which a questionnaire was drafted for the conduction of the facility survey across all categories of SWIs. Finally, the questionnaire itself was validated by the experts before administration.

Data Collection and Analysis

The PHI survey was filled by Mental Health Professionals (MHPs) stationed at the facility and the SWI survey was filled by Person-in-Charge or Counsellor stationed at the facility. Completed questionnaires bearing the signature/seal of the professional were brought back to the principal investigator. Quantitative data was cleaned and fed into WHO-AIMS Data Entry Excel program for organizing and assessing the various input variables. Finally, data generated through the SWI and PHI Facility Survey was assessed using descriptive statistics. All statistics were collected in 2018 and 2019 and are based on the year 2017 and 2018, unless otherwise specified.

FINDINGS

A. Domain 1: **Policy and Legislative Framework**

This domain assessed the following facets of the mental health system of Bihar: mental health policy, mental health plan, mental health legislation, monitoring and training on human rights in mental health and financing of mental health services. Since the Government of India has laid down the national mental health policy and legislative framework which includes the state of Bihar, the implementation status of this framework in the state was also analyzed.

WHO-AIMS Indicator	Indicators	Bihar	India
	Policy and law		
1.1	Mental health policy is available	✗	✓
1.1.3	Psychotropic medicines included on the essential medicines list	✓	✓
1.2	Mental health plan is available	✗	✓
1.3.1	Mental health legislation is available	✓	✓
1.3.3	Standardized documentation and procedures for implementing mental health legislation exist	✗	✓
	Human Rights protection in mental health services		
1.4.1	National or state-level review bodies on Human rights exist	✓	✓
1.4.2-1.4.3	Human rights review bodies conduct inspection and review of mental health facilities	✗	–
1.4.4	Staff at Mental health facilities are trained on human rights protection of patients	✗	–
	Financing of mental health services		
1.5.1	Mental health budget is available	✗	✗
1.5.3	Mental disorder are covered by social insurance schemes	✗	✗
1.5.1	Governments total expenditure on mental health as percentage of total government heath expenditure is more than 1%	✗	✓

Mental Health Policy & Mental Health Plan

At the national level, the first and only National Mental Health Policy of India was launched in 2014. It calls for downsizing large mental hospitals and reform the existing mental hospitals to provide more comprehensive care while prioritizing development of community mental health services. This policy requires states such as Bihar to focus on the following areas when formulating their state mental health policy: effective governance and accountability for mental health; promotion of mental health; prevention of mental illness and reduction of suicide and attempted suicide; universal access to mental health services; improving availability of mental health human resource; community participation for mental health and development; and monitoring and research in mental health. However, the GoB is yet to formulate a state mental health policy and a plan of action/state mental health plan, laying down concrete steps for implementing such policy.

Mental Health Law

The Mental Healthcare Act 2017 (MHA), a central legislation which lays down the institutional framework of the national mental health system, provides rights and legal remedies to persons with mental illness and lays down duties for the national and state governments for providing care and protection to persons with mental health problems, became operative from April 7, 2017. The central rules for implementation of the MHA has been notified and the Central Mental Health Authority has been constituted by the Government of India to administer and regulate the national mental health system.[22]However, at the time of writing this report, the GoB had not notified state rules for the implementation of the MHA 2017 and no standardized documentation and procedures for implementing the legislation existed at the state level. In comparison to Bihar, around 19 state governments in India have begun steps to implement this law by constituting a State Mental Health Authority (SMHA) in their respective states. [23]A SMHA is required in the state for: advising the GoB on all matters relating to mental health; registering and regulating all mental healthcare establishments (MHEs); developing quality and service provision norms for all MHEs; regulating mental health professionals (MHPs); and other functions related to mental health that is required by the GoB.To this end, the SMHA needs to constitute Mental Health Review Boards (MHRBs) across districts, whose main functions are to register and review advance directives of Persons with Mental Illness (PMIs), appoint nominated representative of the PMIs and decide objections against Mental Health Professionals (MHPs) and MHEs. In absence of a SMHA or an existing government agency designated to administer this role, mental health continues to be a neglected area of government action, with no mechanism in place to ensure regulation of the quality of care being delivered within the state mental health system. In addition, the existing health laws and policies in Bihar do not recognize the relationship between the determinants of mental and physical health.

Mental Health Programme and Schemes

At the state level, no programme or scheme on mental health has been initiated by the GoB. The District Mental Health Programme (DMHP) which is a component of the National Mental Health Program (NMHP)is the only mental healthcare services scheme being implemented in the state since 2015. The DMHP focuses on providing community mental healthcare services by integrating mental healthcare with primary healthcare services being provided at PHIs. However, it is currently functional in only 11 out of 38 districts in the state. Persons with mental health problems have a right to access mental healthcare at PHIs under the MHA which requires the appropriate state governments to provide minimum mental health services within all districts, the failure of which attracts stringent provisions for the government, for reimbursing costs to patients for availing such services at another health facility. The reimbursement of such costs is limited to the rates specified by the GoI from time to time. [24]In view of this provision, a mechanism for reimbursement of mental healthcare costs is required in districts where the DMHP is not being implemented.

The other components of the NMHP include schemes for setting up centres of excellence across the country and aiding Government Medical College and Hospitals to set up or increase post-graduation

[22] Mental Healthcare (Central Mental Health Authority and Mental Health Review Boards) Rules, 2018; Mental Healthcare (State Mental Health Authority) Rules, 2018; and Mental Healthcare (Rights of Persons with Mental Illness) Rules, 2018.

[23] Minutes of National Level Review Meeting on Mental Health organized by the National Human Rights Commission on 7 August, 2019.

[24] Section 5, The Mental Healthcare (Rights of Persons with Mental Illness) Rules, 2018, Ministry of Health and Family Welfare, Government of India, (May 29, 2018).

courses in psychiatry, psychiatric social work, psychiatric nursing and other mental health specialities. These components of the NMHP have not been implemented in Bihar.

Essential Drug List

The essential categories of psychotropic medicines include: antipsychotics, anxiolytics, antidepressants, mood stabilizers and antiepileptic drugs,all of which are present in Bihar's State Essential Drug List (BSEDL) 2018 for different categories of PHIs, being Mental Hospital, Government Medical College and Hospital and District Hospitals. For primary healthcare institutions, such as, Additional PHCs, PHCs and CHCs,the BSEDL 2018 only includes medicines of the following therapeutic categories: antidepressants and antiepileptic medicines.

Financing of Mental Health Services

The State Mental Health Fund has not been constituted under the MHA and there is no consolidated fund for mental health expenditure in the state of Bihar. Currently, less than one percent of healthcare expenditures by the Health Department, GoB are directed towards mental health. These expenditures include budgetary allocation from the GoI and GoB for any activity related to mental health in Bihar. The major areas of mental healthcare expenditure include expenses on mental healthcare services provided at the Mental Hospital, Psychiatry Departments at Government Medical College & Hospitals and District Mental Health Programme centres at District Hospitals. Funds are separately allocated to Bihar Medical Services & Infrastructure Corporation Limited by the Health Department, GoB for procuring and providing psychotropic drugs to these PHIs. Of thetotal expenditures on mental health in the state, 21 percent are directed towards mental hospitals. In terms of affordability of mental healthcare, no health or social insurance schemes or programmes which cover MNS disorders for financial aid have been initiated by the GoB.

All health insurance service providers are now required by law to include mental and neurological disorders for coverage protection and cannot exclude them as pre-existing conditions. In total there are 87 health insurance products being serviced by private insurers that have been approved for the financial year 2018-19, by the Insurance Regulatory and Development Authority of India (IRDA), out of which 17 products provide coverage for mental illness as defined by the Mental Healthcare Act (2017), or for specific disorders such as Alzheimer's and Creutzfeldt-Jacob Disease (CJD). The Pradhan Mantri Jan Aarogya Yojana, a national health insurance scheme run by the Government of India to provide free protection cover to poor and vulnerable families, also includes 17 packages for mental and neurological disorders. These packages cover costs for inpatient mental healthcare services.

Less than one percent of the state's population has free access to essential psychotropic medicines. In respect of affordability of antipsychotic medication, one percent of the daily minimum wage is needed to pay for a day of antipsychotic medication by a user without any reimbursement and using the cheapest available antipsychotic drug in Bihar. [25]Three percent of the daily minimum wage is needed to pay for a day of antidepressant medication by a user without any reimbursement, using the cheapest available antidepressant drug in the state.[26]

[25] The cost of the medicine is based on the retail price paid by the user assuming no reimbursement from insurance or government schemes. The minimum wage is based on the rate for unskilled worker as notified by the Labour Department, Government of Bihar.

[26] Ibid.

Figure 7.1 State expenditure towards mental health based on actual expenditure (2017-18) and revised estimates for (2018-19).

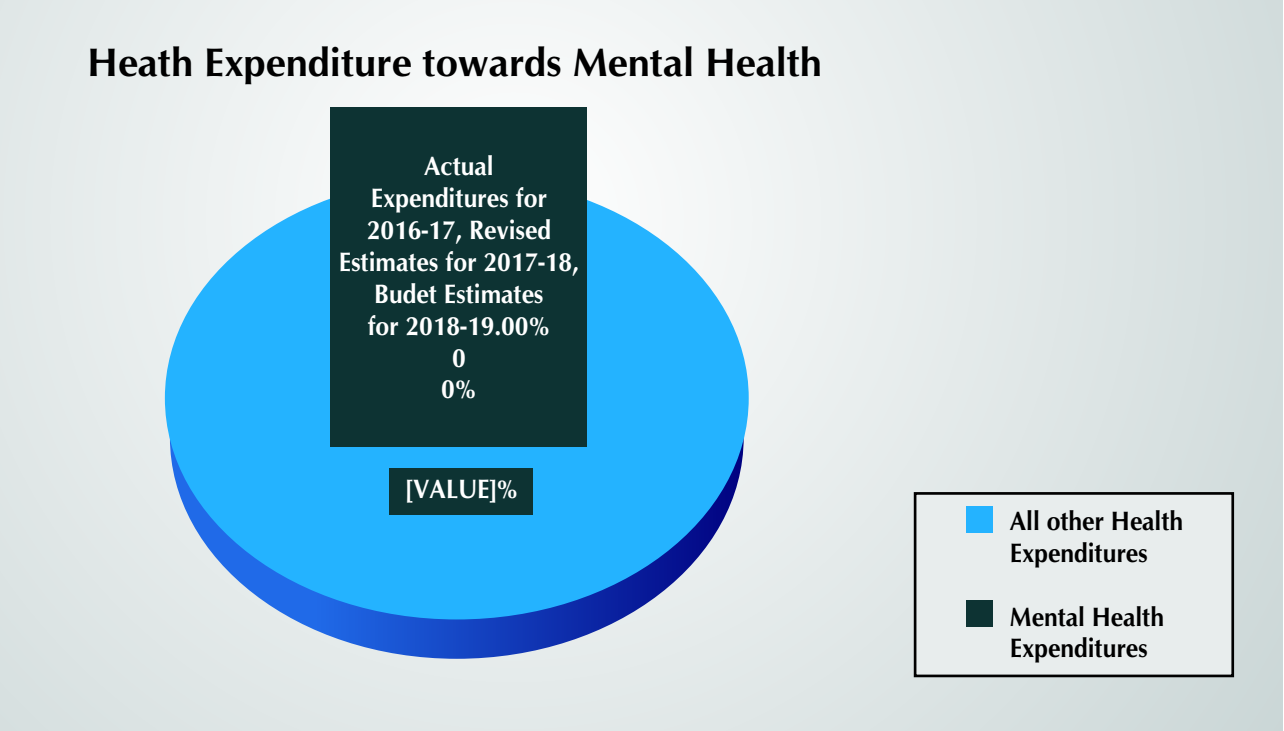
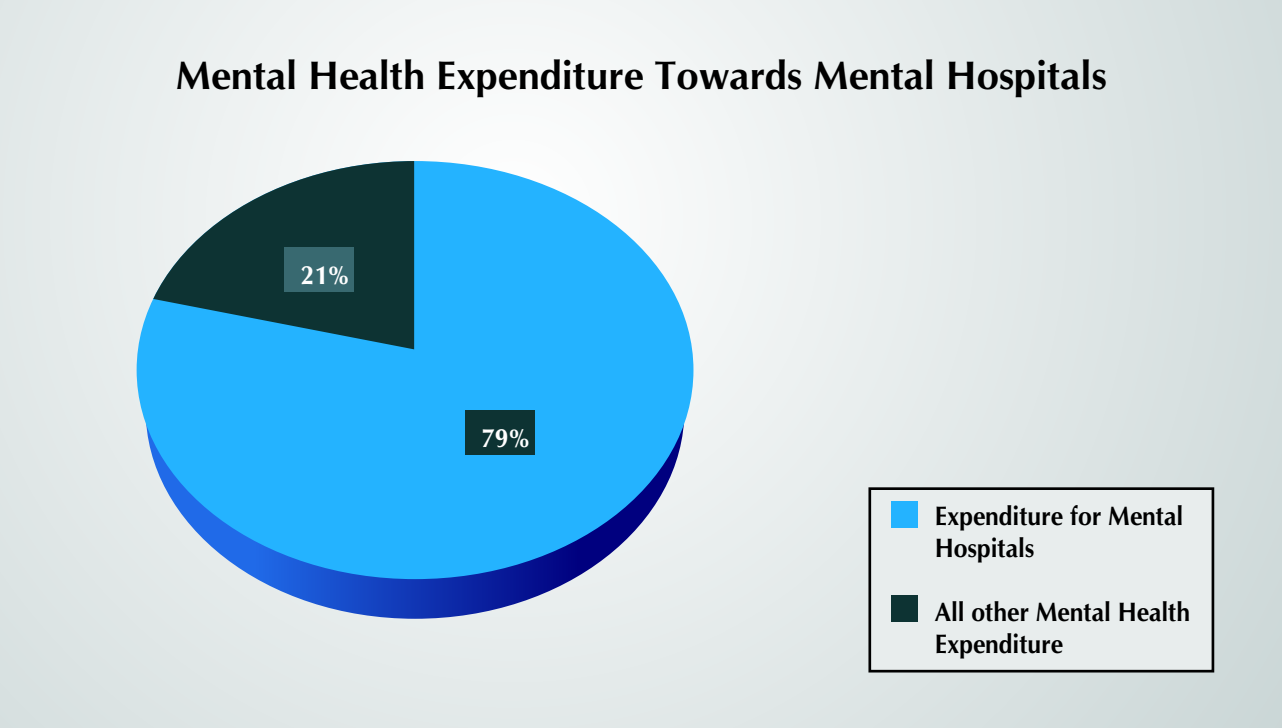


Figure 7.2 State expenditure on Mental Hospital based on actual expenditure (2017-18) and revised estimates for (2018-19).



Human Rights Policies

The National Human Rights Commission (NHRC) of India operates as a national-level review body, with power to oversee regular inspections in mental health facilities, review involuntary admission and discharge procedures, and review complaints of human rights violations of persons with mental health problems. [27]NHRC has the authority to impose penalties, initiate proceedings for prosecution, approach the Supreme Court of India or the High Courts in the states for any direction, order or writ, that it may deem necessary, and take such other action as it may think fit. At the state level, the State Human Rights Commission (SHRC) exercises the same powers and performs the same functions as the NHRC. Currently, there is no system in place for review/inspection of human rights protection of persons with mental health problems at private or public health care institutions by the SHRC. In the last five years, no review or inspection has been conducted by the SHRC or the NHRC at SWIs and PHIs providing mental healthcare in the state. None of the employees at PHIs or SWIs have had at least one day of training on human rights protection of patients in the last five years.

B. Domain 2: **Mental Health Services**

Analysis under the second domain discerned the availability of various kinds of mental health facilities in the state, namely, mental health outpatient facilities, day treatment facilities, community-based psychiatric inpatient units, community residential facilities, mental hospitals, forensic inpatient units and other residential facilities. In addition, organizational integration of such services, availability of essential psychotropic medicines, availability of essential psychosocial treatment in mental health facilities and equity of access to mental health services was also evaluated.

WHO-AIMS Indicator	Indicators	Bihar
	Organizational Integration of mental health service a cross facilities	
2.1.1	State mental health authority exists	✗
2.1.2	Organization of mental health services by catchment areas/service areas	✗
2.1.3	Mental hospitals organizationally integrated with mental health out patient facilities.	✗
	Availability of different kinds of mental health facilities	
2.2	A. Mental health out patient facility	✓
2.3	B. Day treatment facility	✗
2.4	C. Community-psychiatric inpatient unit	✓
2.5	D. Community residential facility	✗
2.6	E. Mental hospital	✓
2.7	F. Mental Health Forensic inpatient unit	✗
2.8	G. Other residential facilities	✗
	Involuntary admission and use of physical restraint & seclusion practices	
2.4.5	Involuntary admissions occur at community-based psychiatric in-patient units	✓
2.4.7	Physical restraint & seclusion practices used at community-based psychiatric in-patient units	✓
2.6.6	Involuntary admissions occur at mental hospital	✓
2.6.10	Physical restraint & seclusion practices used at mental hospital	✓
	Availability of Psychosocial treatment at mental health facilities	
2.9.1	Psychosocial intervention provided in mental hospital	✓
2.9.2	Psychosocial intervention provided in community-based psychiatric in patient units	✗
2.9.3	Psychosocial intervention provided in mental health outpatient facilities	✓
	Availability of Psychotropic drugs at mental health facilities	
2.10.1	Psychotropic drugs provided by mental hospital	✓
2.10.2	Psychotropic drugs provided by community-based psychiatric inpatient units	✓
2.10.3	Psychotropic drugs provided by mental health out patient facilities	✓
	Equity of access to mental health services across different population groups	
2.11.1	Per capita ratio of the number of psychiatric beds in or near the largest city to the total number of psychiatric beds in the state	
2.11.2	Access of mental health out patient services by rural users	✓
2.11.4	Access of mental health out patient services by religious & ethnic minority group	✓
2.11.5	Access of inpatient care at mental hospital is by ethnic and religious minority group	✓
	Interaction of mental health facilities with complimentary/alternative/traditional practitioners	
3.3.3	Mental Health facilities interact with complimentary / alternative/ traditional practitioners	✓

Organization of Mental Health Services

At the national level, the Central Mental Health Authority (CMHA) as constituted by the GoI under the MHA 2017 operates as a national organizational entity for mental health. In Bihar, since the State Mental Health Authority has not been constituted, there is no organizational entity responsible for mental healthcare in the state. Consequently, the existing mental healthcare establishments, whether at PHIs or private institutions, are not monitored by any mental health authority for quality assessment of mental health services.

Only mental health outpatient and inpatient services are available in the state of Bihar. There are no day treatment facilities, forensic inpatient unit dedicated to mental healthcare, community residential facilities and other residential facilities catering to the needs of persons with mental health problems requiring long-term care. There are three categories of PHIs that deliver outpatient and inpatient mental healthcare services in the state. These include Mental Hospital, Government Medical College and Hospitals Service and District Mental Health Programme Centres operating under the DMHP at District Hospitals.

As can be seen in Figure 2.1, mental health outpatient services are available at all 21 PHI sites sampled for the survey which includes 1 Mental Hospital, psychiatry department at all Government Medical College and Hospitals (GMCHs) in the state (n = 9[28]) and 11 out of 38 District Hospitals which have District Mental Health Program (DMHP) centres. The outpatient facility at the mental hospital has been dealt with separately in this report from the mental health outpatient facilities at the GMCHs and the DMHP centres, as the former is part of a mental hospital and not a community-based healthcare facility.

As listed in Figure 2.2, inpatient mental health services are only available at 5 out of the 21 PHI sites and only 4 of these facilities qualify as community-based psychiatric inpatient facility, as 1 Mental Hospital provides inpatient care, but for longer durations. Three of the GMCHs that provide community-based inpatient mental healthcare are in the city of Patna. In the eastern region of Bihar, the GMCH in Bhagalpur is the only PHI that provides community-based inpatient mental healthcare.

[28] The GMCH, West Champaran has been excluded from the list, to avoid double counting of facilities, as GMCH, West Champaran has been officially merged with the District Hospital, West Champaran,

Figure 8.1 Total number of Public Healthcare Institutions (PHIs) in Bihar providing mental health outpatient services

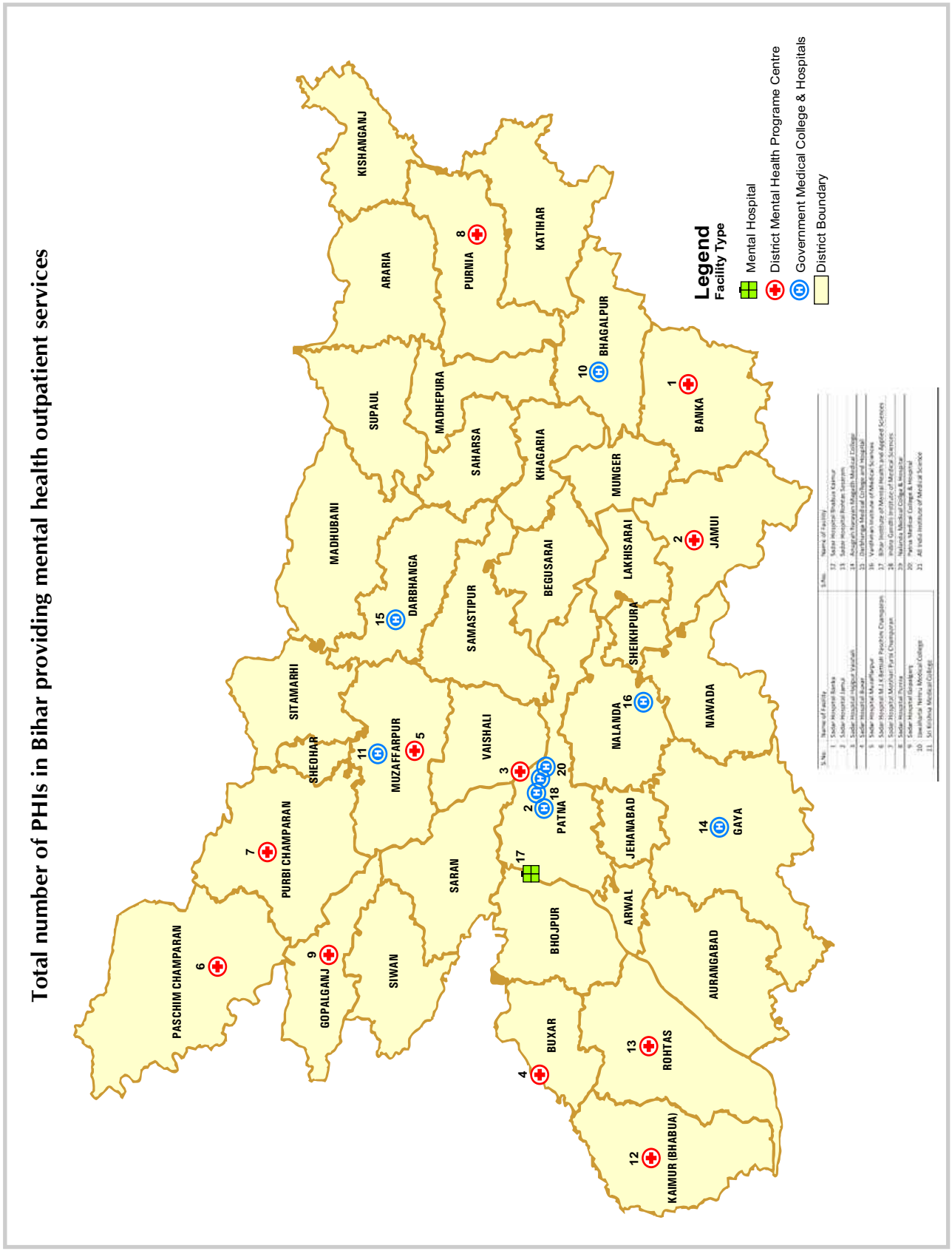
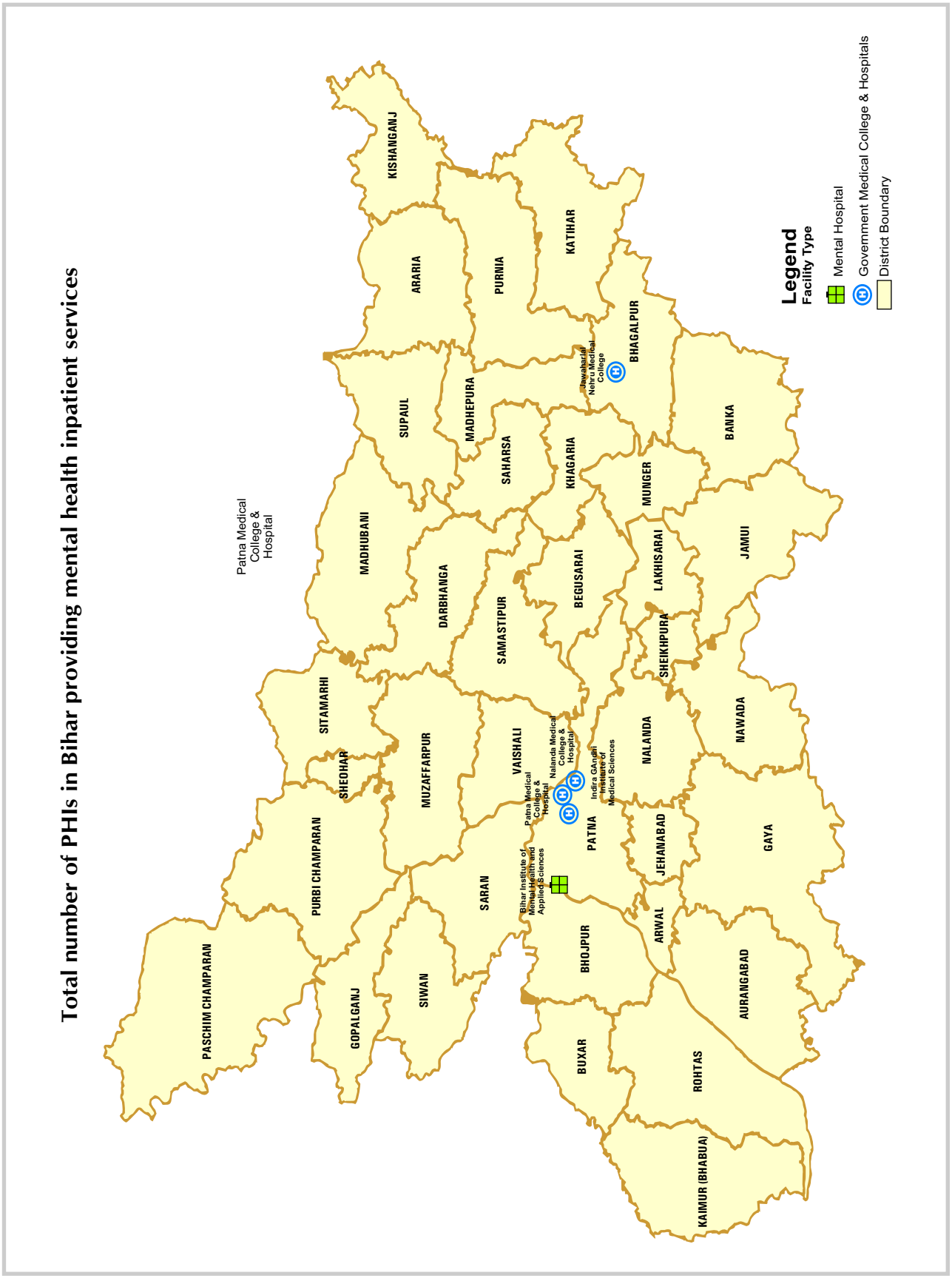


Figure 8.2 Total number of Public Healthcare Institutions providing mental health inpatient services in Bihar



In respect of a referral system, an informal system exists between the Mental Hospital and other PHIs, including GMCH, DMHP centres and primary healthcare institutions (CHCs and PHCs), to the extent that the Mental Hospital treats users referred by healthcare professionals at the other institutions for both inpatient and outpatient mental healthcare. But the Mental Hospital is not organizationally integrated with other mental health outpatient facilities in the state or other PHIs that do not provide mental healthcare. As these facilities do not have a formal referral system in place, they are unable to work in a coordinated manner to facilitate continuity of care for users.

While primary healthcare institutions refer users for mental healthcare services to the nearest DMHP centre at District Hospitals, GMCHs and the Mental Hospital, the number of referrals from primary healthcare institutions to secondary (District Hospital) and tertiary care institutions (GMCH, Mental Hospital) is very low. At the same time, due to unavailability of mental healthcare services at primary and secondary tier institutions, the burden on tertiary care institutions for providing both outpatient and inpatient mental healthcare is substantially high. GMCHs that do not have a functioning mental health inpatient department, refer users requiring inpatient care to nearest GMCH with a community-based psychiatric inpatient facility or the Mental Hospital.

Mental Hospital

There is one mental hospital in the state which is located at Koilwar, Bhojpur and is known as BIMHAS. Both outpatient and inpatient mental healthcare services are available at the mental hospital. In line with the National Mental Health Policy (2014), the Department of Health, Government of Bihar has made consistent efforts to provide comprehensive care at the Mental Hospital. Around 0.69 mental hospital beds are currently available per 100,000 general population. A 68 percent decrease in the total number of beds in the last five years has contributed to a low availability of mental hospital beds. In 2014, the children ward was completely shut off and to address this, around 12 percent of the total beds in the male and female wards have been reserved for children and adolescents. However, there are no exclusive inpatient or outpatient facilities that are specifically meant for children and adolescent users. Cumulative number of days spent by all inpatient users was 28,047 and 26,992 in the year 2017 and 2018, respectively.

Out of all the PHIs, the highest number of users treated for both outpatient and inpatient services were reported at BIMHAS. The total number of users treated at the mental hospital outpatient facility constituted 37.5 percent of the total number of mental health outpatient users treated across all PHIs in the year 2017 and 2018 combined. Out of the total number of outpatient usersat the mental hospital, 36.1 percent users were female and 3.3 percent users were children under 14.

Figure 8.3 Total number of users treated at the Mental Hospital Outpatient facility for the year 2017 and 2018, classified by age and sex.

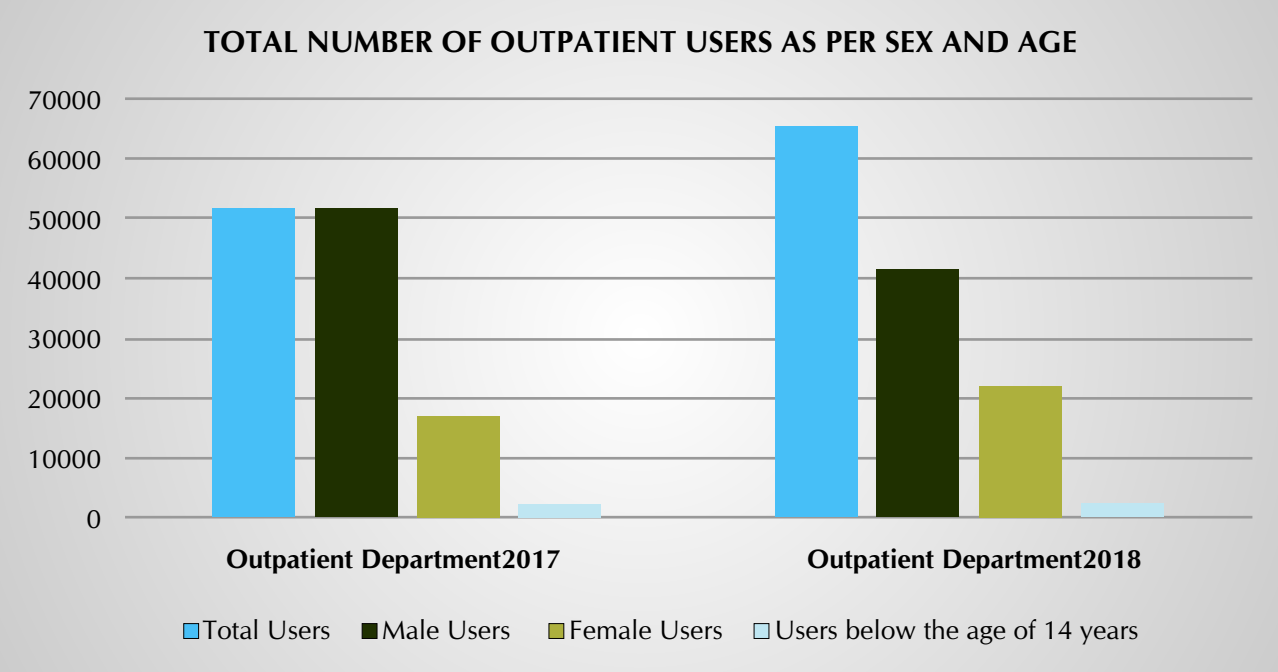
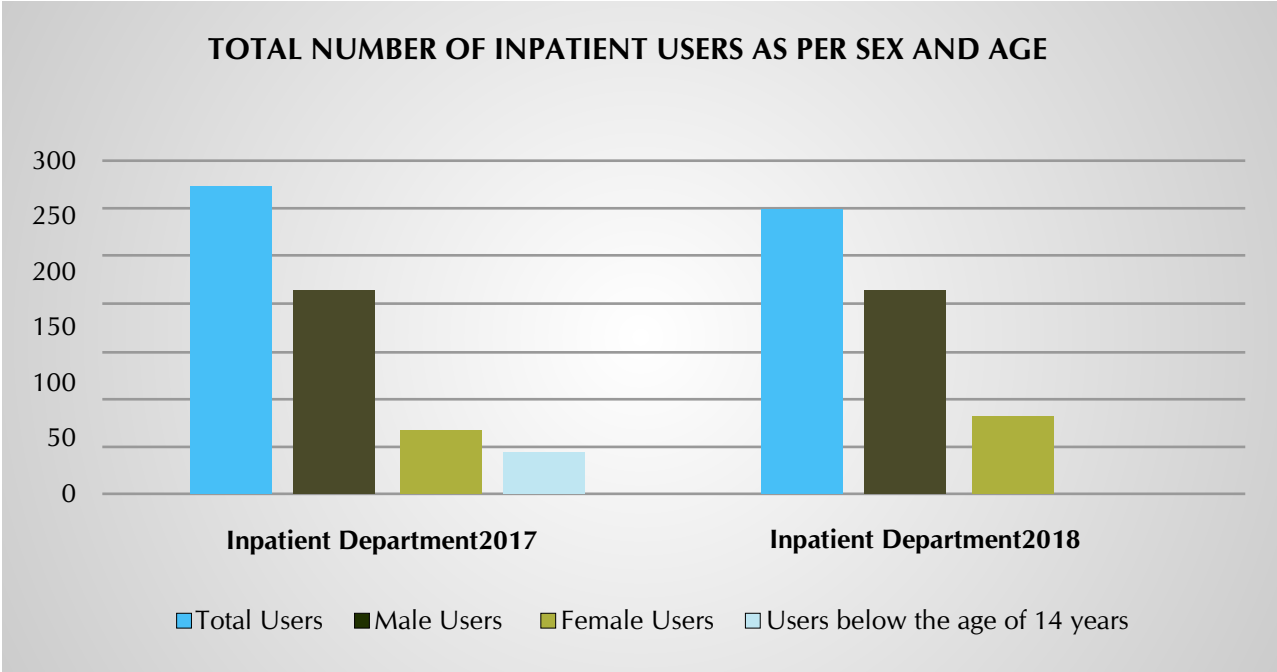


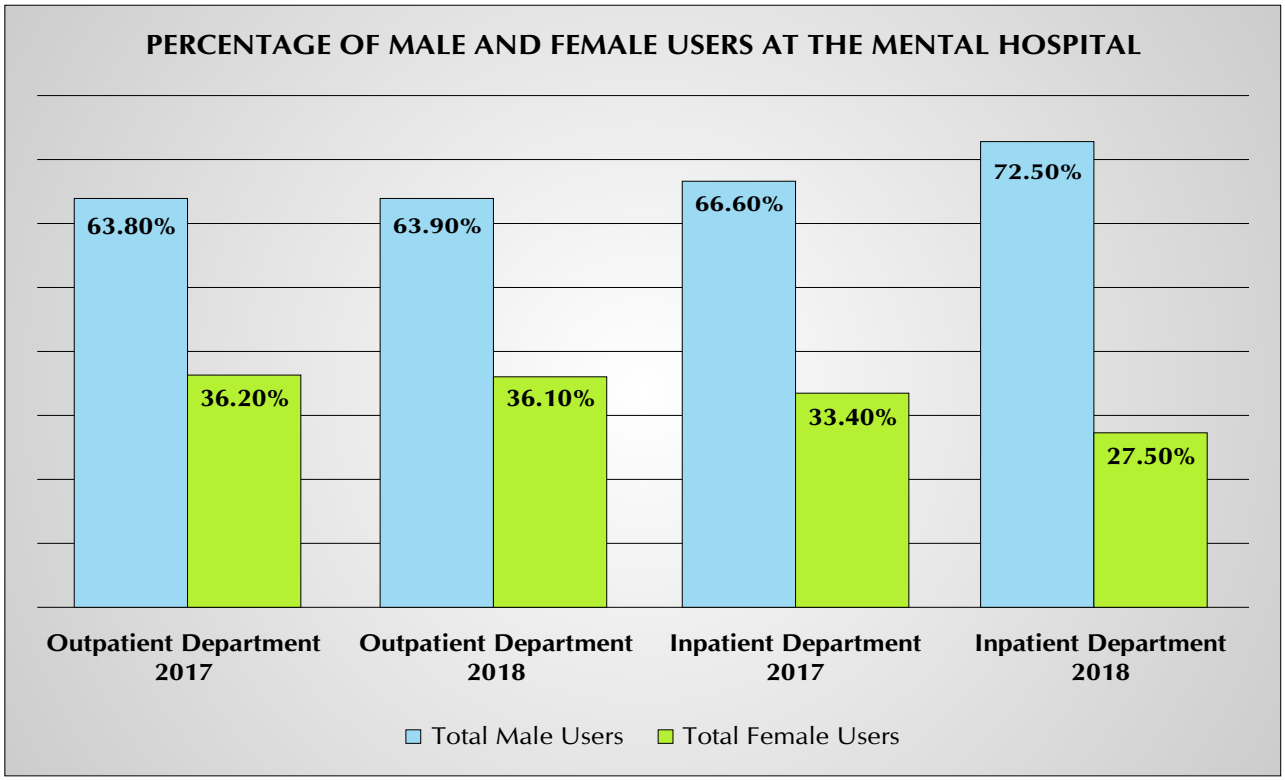
Figure 8.4 Total number of users treated at the Mental Hospital Inpatient facility for the year 2017 and 2018, classified by age and sex.



The number of inpatient users at the mental hospital is 0.43 per 100,000 general population. Out of the total number of users treated at the mental hospital inpatient facility (n = 531) for both years combined, 30.4 percent were females and 6.7 percent were children under 14. Data on classification of users according to diagnosis was not available for both outpatient and inpatient users at the mental hospital. Hundred percent of the admissions to the inpatient facility were involuntary. None of the users were reported to have been physically restrained or secluded even once.

The average number of days spent in mental hospital is 104. The occupancy rate at mental hospital is 89 percent and 93 percent for the year 2017 and 2018, respectively. Eighty percent of users treated at the mental hospital inpatient facility spend less than one year and 20 percent users spend 1-4 years. No user was reported as spending more than 4 years in the mental hospital. The majority of outpatient and inpatient users (51-80 percent) received some form of psychosocial interventions at both outpatient and inpatient facilities at the mental hospital. More than one psychotropic medicine of each therapeutic class (anti-psychotic, antidepressant, mood stabilizer, anxiolytic, and antiepileptic medicines) is available at the mental hospital.

Figure 8.5 Percentage of male and female users treated at the outpatient and inpatient facilities at the Mental Hospital in the year 2017 and 2018

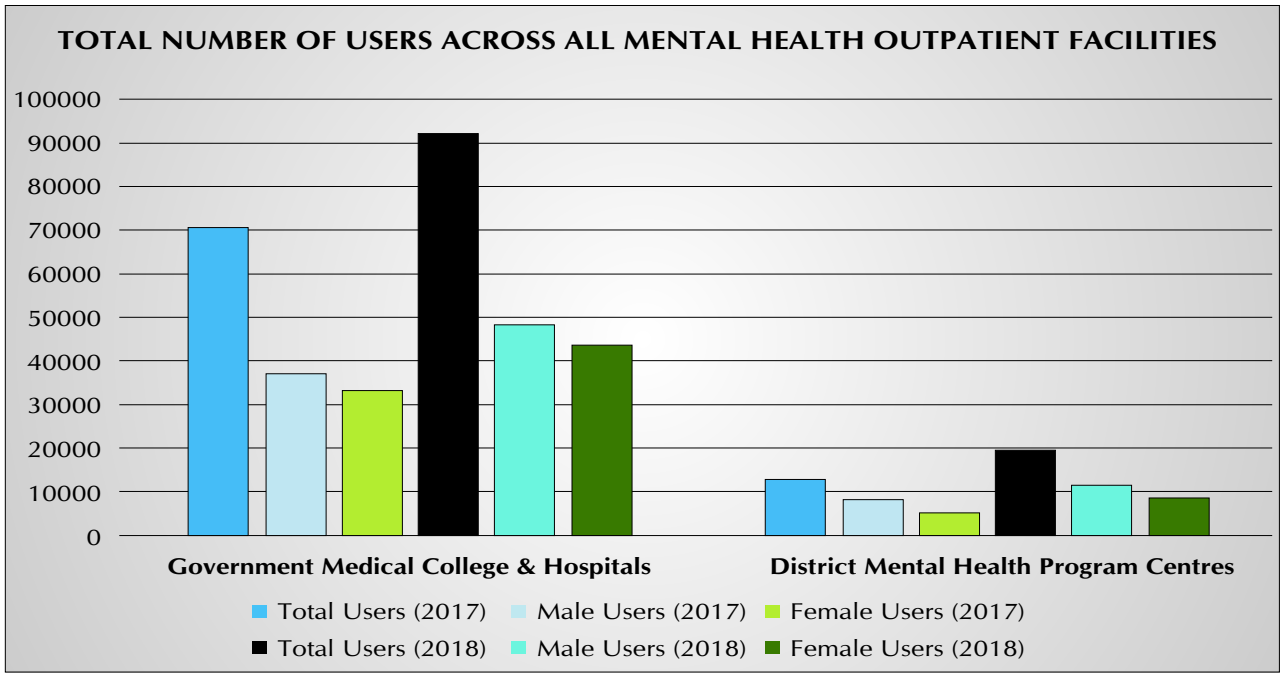


Mental Health Outpatient Facilities

There are 20 mental health outpatient facilities that areoperative across 9 GMCHs and 11 DMHP centres. They are distributed across16 districts of Bihar with 4 facilities located in Patna. None of these facilities are exclusively meant for treatmentof children and adolescent users. The total number of users treated at all

mental health outpatient facilities for the year 2017 and 2018 was 83,153 and 1,11,917, respectively.None of these facilities maintain data on the number of mental health outpatient contact/interaction involving users and staff members at the facility. After the Mental Hospital, the Government Medical College and Hospital category had the second highest number of users, while DMHP centres saw the least number of users.

Figure 8.6 Total number of users at all Mental Health Outpatient facilities for the year 2017 and 2018, classified by sex



In one year (from 2017 to 2018), the total number of users treated across all mental health outpatient facilities increased by 14.9 percentage points. The highest growth in the number of users was experienced at DMHP centres (33.6 percent), depicting an increase in access to and use of mental healthcare in the rural areas of the state.

Figure 8.7 Proportion of users across all Mental Health Outpatient facilities in Bihar for the year 2017 and 2018.

PROPORTION OF OUTPATIENT USERS ACROSS MENTAL HEALTH OUTPATIENT FACILITIES

District	Facility type	Users Treated (2017)	Users Treated (2018)
Gopalganj	DMHP Centre at District Hospital	0.36%	0.68%
West Champaran	DMHP Centre at District Hospital	0.76%	0.74%
East Champaran	DMHP Centre at District Hospital	2.33%	2.75%
Muzaffarpur	DMHP Centre at District Hospital	2.36%	1.81%
Vaishali	DMHP Centre at District Hospital	2.08%	1.77%

District	Facility type	Users Treated (2017)	Users Treated (2018)
Buxar	DMHP Centre at District Hospital	0.91%	1.12%
Kaimur	DMHP Centre at District Hospital	0.63%	1.41%
Rohtas	DMHP Centre at District Hospital	0.3%	2.17%
Jamui	DMHP Centre at District Hospital	0.28%	0.6%
Banka	DMHP Centre at District Hospital	3.03%	2.32%
Purnea	DMHP Centre at District Hospital	2.18%	2.25%
Patna	Patna Medical college and hospital (PMCH)	22.93%	16.86%
Patna	Indira Gandhi Institute of Medical Sciences (IGIMS)	3.11%	2.2%
Patna	Nalanda Medical college and hospital (NMCH)	9.02%	7.29%
Patna	All India Institute of Medical Sciences (AIIMS)	8.69%	15.71%
Nalanda	Vardhman Institute of a Medical Sciences (VIMS)	7.15%	12.75%
Darbhanga	Darbhanga Medical College and Hospital (DMCH)	5.67%	4.99%
Muzaffarpur	Sri Krishna Medical College (SKMC)	2.51%	1.92%
Gaya	Anugrah Narayan Magadh Medical College (ANMC)	2.76%	3.48%
Bhagalpur	(JNMC) Jawaharlal Nehru Medical College	22.94%	17.19%
	TOTAL (100%)	**83153**	**111917**

Out of the total number of mental health outpatient users treated at all GMCHs, 47.4 percent were females and 11.1 percent were children and adolescents. Around 41 percent of all users treated at DMHP centres were female and data on the proportion of users that were children or adolescents was not available at any DMHP centre. While male users were reported to be higher than female users at the majority of mental health outpatient facilities, DMHP centresin the districts of West Champaran and Kaimur, and the GMCHs including DMCH in Darbhanga, VIMSin Nalanda, and JNMCin Bhagalpur reported higher number of female users in both the years. In 2018, the DMHP centre in Kaimur experienced a 244 percent increase in the total number of female users in comparison to 160 percent increase in the total number of male users from the previous year. User data classified as per diagnosis was

only available at DMHP centres and GMCH could not provide such records. The diagnostic categories as adapted by the DMHP teams include the following: Psychosis; Neurosis; Epilepsy; Depression; Dementia; Mental Retardation; Autism; Substance abuse; Other mental disorders in child. The users treated at DMHP centres were primarily diagnosed with Neurosis and Psychosis.

Figure 8.8 ***Classification of outpatient users at District Mental Health Program (DMHP) centres by Diagnosis***

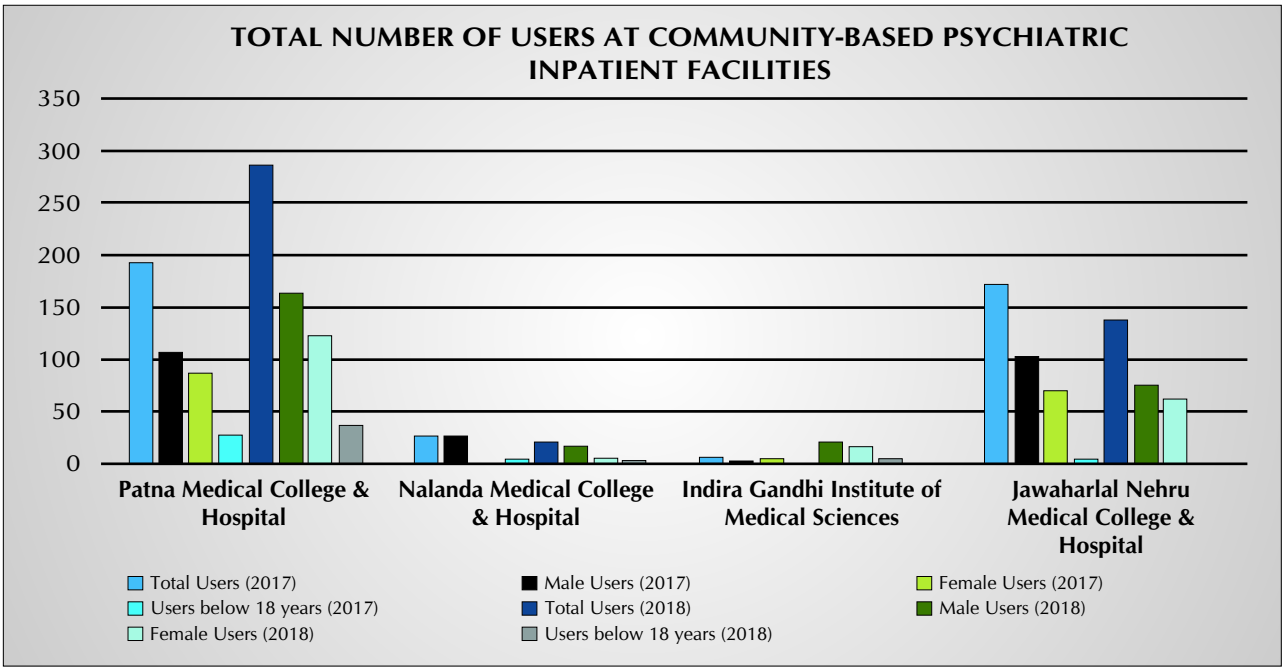
User Diagnosis by Mental Health Outpatient Facility at District Mental Health Program (DMHP) centres		
	2017	2018
Psychosis	27.10%	19.90%
Neurosis	36.40%	40.90%
Epilepsy	4.90%	5.60%
Depression	11.20%	9.50%
Dementia	1.80%	2.20%
Mental Retardation	6.10%	7.90%
Autism	0.60%	0.20%
Cases with Suicidal Risk	-------	0.10%
Substance Abuse	3.90%	3.50%
Other Mental Health Disorder in Child	7.70%	10.20%
TOTAL	**100%**	**100%**

Eighty percent of the mental health outpatient facilities provide psychosocial treatment to all users. Thirty-eight percent of all mental health outpatient facilities provide follow-up community care, while 5 percent have mental health mobile teams that run mobile clinics in the community. In terms of availability of treatment, the majority of mental health outpatient facilities (80.9 percent) offer any form of psychosocial treatments. All mental health outpatient facilities have at least one psychotropic medicine of each therapeutic class (anti-psychotic, antidepressant, mood stabilizer, anxiolytic, and antiepileptic medicines) available in the facility or at a nearby pharmacy, all year round.

Community-based Psychiatric Inpatient Facilities

There are 4 community-based psychiatric inpatient facilities available across all PHIs in Bihar and only 0.04 community-based psychiatric beds are available per 100,000 general population. Since these facilities are available only at selected GMCHs and none of the DMHP centres have a functional community-based psychiatric inpatient facility, there is no access to mental health inpatient care in rural areas of the state. There is no separate inpatient ward for children and adolescents at the available community-based psychiatric inpatient facilities and zero percent of the beds at these facilities are reserved for children and adolescent users. All community-based psychiatric inpatient facilities provide psychosocial treatment.

Figure 8.9 Total number of users across all community-based psychiatric inpatient facilities for the year 2017 and 2018, classified by age and sex



As for the total number of users treated across all community-based psychiatric inpatient facilities, PMCH in Patna and JNMC in Bhagalpur accounted for more than 90 percent, NMCH in Patna accounted for 5.6 percent and IGIMS in Patna accounted for 3 percent of the total users treated at community-based psychiatric inpatient facilities in 2017 and 2018 combined. Out of this, around 42 percent of admissions to community-based psychiatric inpatient facility were female and 9 percent of admissions were children and adolescents. Around 3 percent of the total admissions at all community-based psychiatric inpatient facilities were reported as involuntary admissions. Except for JNMC Bhagalpur, all other facilities recorded the use of physical restraint and seclusion on over 20 percent of inpatient users at least once in the past two years.

Figure 8.10 Proportion of users across all community-based psychiatric inpatient facilities in Bihar for the year 2017 and 2018, classified by age and sex.

FACILITY NAME	IPD USERS (2017)			IPD USERS (2018)		
	Total	Total Female	Below 18 years	Total	Total Female	Below 18 years
Patna Medical college & hospital (PMCH)	48.37%	54.04%	78.38%	61.51%	26.45%	81.82%
Indira Gandhi Institute of Medical Sciences (IGIMS)	1.75%	2.48%	0	4.09%	2.58%	11.36%
Nalanda Medical college and hospital (NMCH)	6.77%	0	10.81%	4.73%	1.08%	4.55%
Jawaharlal Nehru Medical college (JNMC)	43.11%	43.48%	10.81%	29.68%	13.55%	2.27%
TOTAL (100%)	399	238	37	465	202	44

Data pertaining to diagnosis of users being admitted was not provided by any of the community-based psychiatric inpatient facilities. On an average, patients across these facilities spend 12.4 days per discharge. Around 21-50 percent of users in community-based psychiatric inpatient units received one or more psychosocial interventions. At least one psychotropic medicine of each therapeutic class (anti-psychotic, antidepressant, mood stabilizer, anxiolytic, and antiepileptic medicines) is available at all community-based psychiatric inpatient facilities or at a pharmacy nearby.

Forensic Inpatient Facilities

There are two forensic inpatient facilities across all PHIs in the state, which is exclusively maintained for the healthcare treatment of individuals who are involved with the criminal justice system. Both these facilities are located at Government Medical College and Hospitals. One is at PMCH in Patna and the other facility is at JNMC Bhagalpur. There are no healthcare treatment facilities as part of prisons in the state. Since there is no exclusive forensic inpatient unit for evaluation and treatment of individuals with mental disorders, they are admitted to the general forensic inpatient facility that is available at the aforementioned GMCHs. None of the beds in these forensic inpatient facilities have been specifically allocated for persons with mental disorders. Data was not available in respect of persons with mental illness who have been treated within these forensic inpatient facilities and the length of their stay at these facilities.

Equity of access to mental health services

The density of psychiatric beds in and near the largest city (Patna) is 6.1 times more than the density of beds in the entire country. Such distribution of psychiatric beds was found to facilitate access to the rural population that constitutes the majority of the state's population. Mental healthcare facilities in the cities of Patna and Bhagalpur reported a higher representation of rural than urban users. None of the facilities reported any users from any linguistic minority groups.

Figure 8.11 Users across all types of mental healthcare facilities in Bihar for the year 2017 and 2018, rate per 100,000 general population

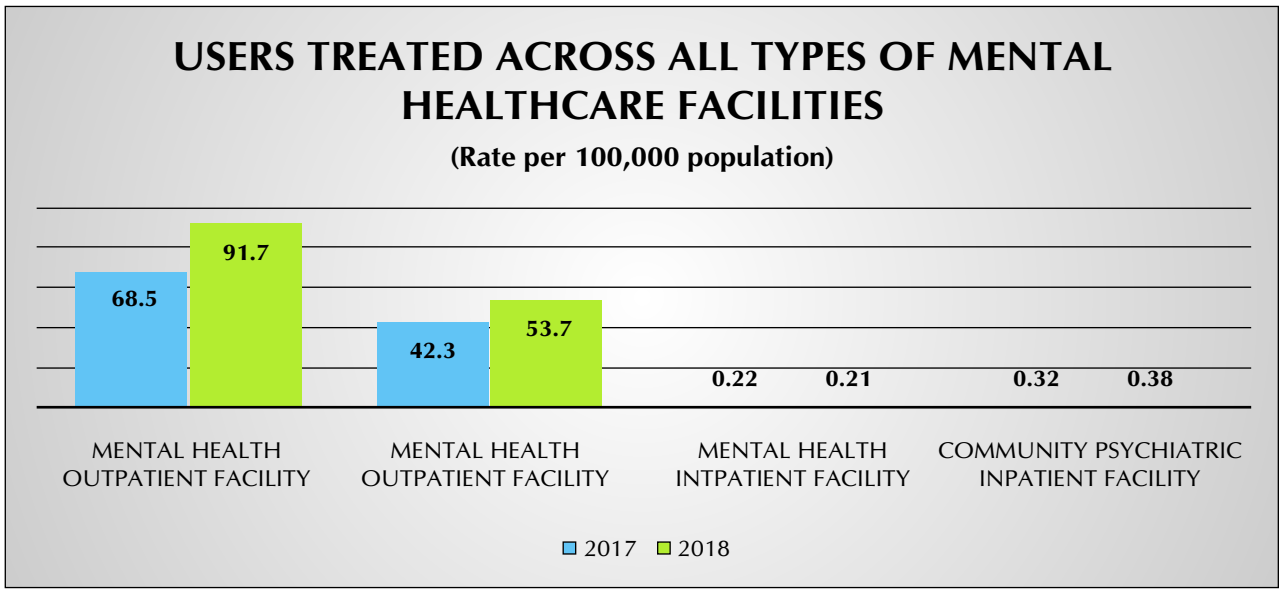


Figure 8.12 Percentage of female users treated across all types of mental healthcare facilities in Bihar for the year 2017 and 2018

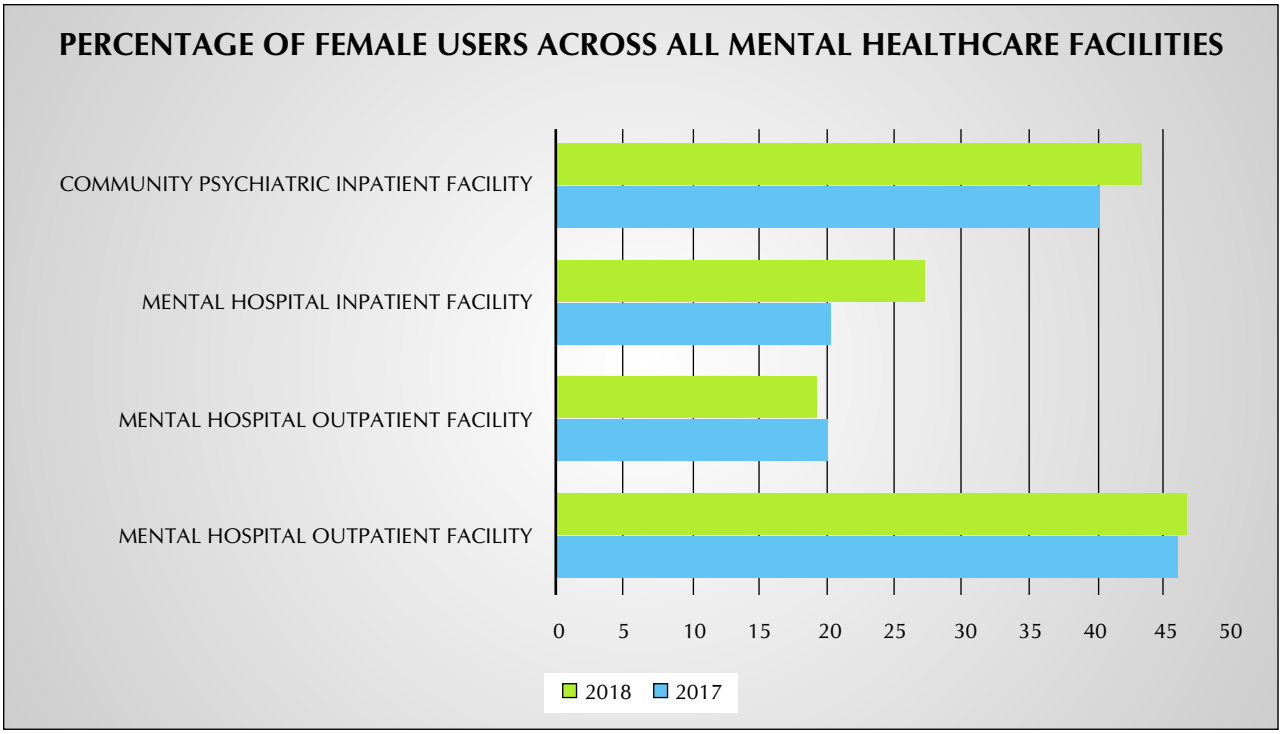
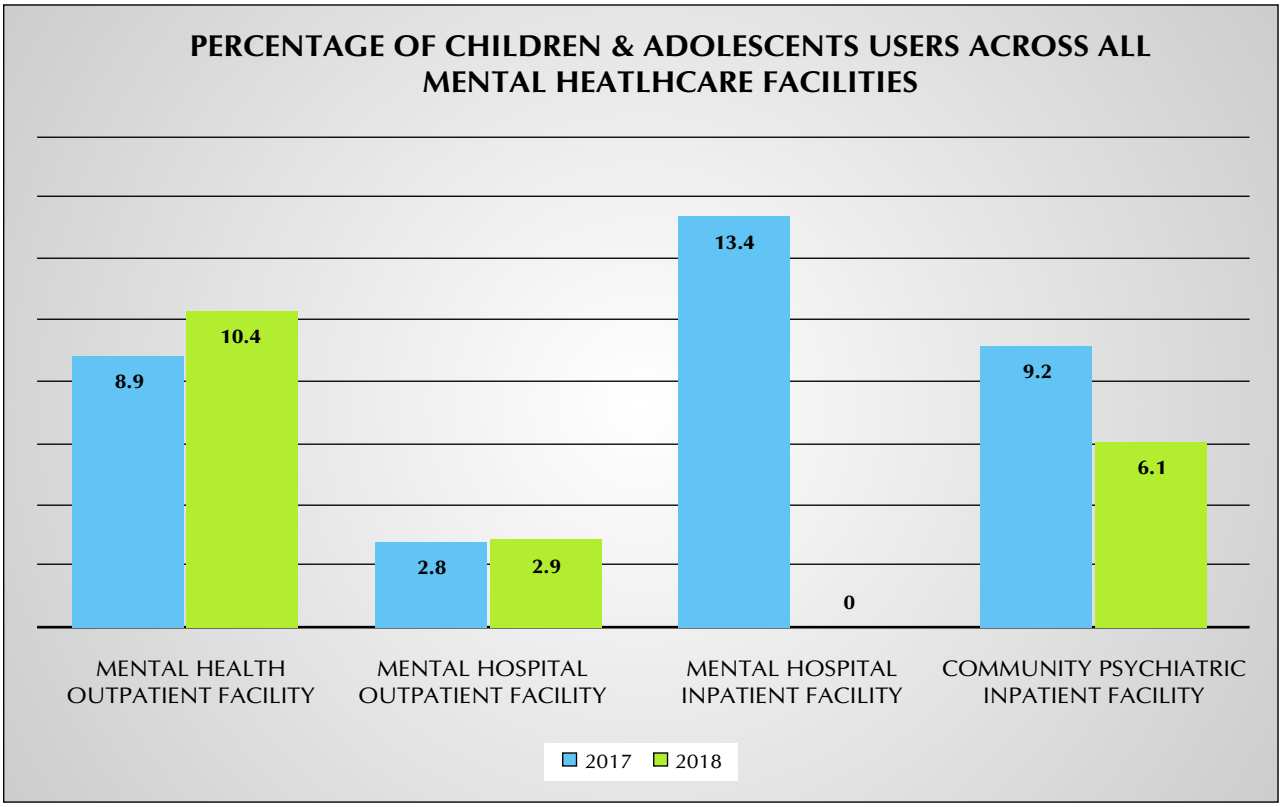


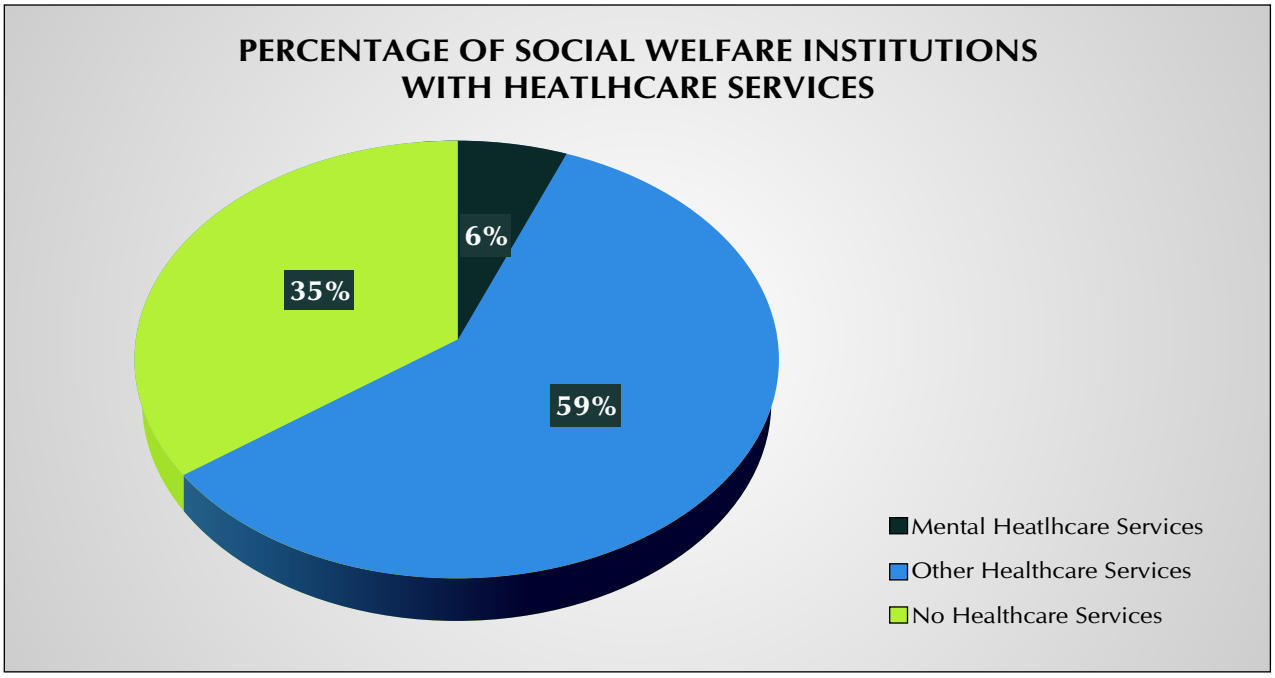
Figure 8.13 Percentage of children and adolescent users treated across all types of mental healthcare facilities in Bihar for the year 2017 and 2018, rate per 100,000 general population



Mental Health Services at Social Welfare Institutions

Only 59 percent of the SWIs deliver healthcare at their facility and around 35 percent of the facilities do not provide any healthcare services. More than 80 percent of the SWIs reported their beneficiaries to include persons with mental health problems but only 6 percent of the SWIs provide mental healthcare services at their facility. More than 40 percent of SWIs refer beneficiaries with mental health problems to mental health professionals outside the facility. The two most common underlying reasons for referral as reported by the facilities include 'unavailability of mental health professional at the facility' and 'violent behaviour by the resident / beneficiary'. Only 24 percent of the SWIs have professionals trained in psychotherapeutic services but 53 percent of SWIs reported as holding regular counselling sessions by non-professionals employed at the facility. A few facilities including Shanti Kutir and Open Shelter reported cases of substance-use but none of the SWIs provide de-addiction based psychosocial treatment. Psychotropic drugs of any therapeutic category were not available at any of the facilities but common medicines for fever, stomach ache, nausea and headache were accessible at all facilities.

Figure 8.14 Social Welfare Institutions that provide Mental Healthcare and other healthcare services



Sixty-five percent of the SWIs prepare Individual Care Plans (ICP) for beneficiaries and the majority of these institutions involve counsellors in the development of ICPs. However, most of these counsellors are not trained in mental health. None of the institutions have a protocol for informed consent for all medical treatments and only 18 percent reported as following a standard procedure for taking consent. Around 47 percent of SWIs provide rehabilitation and reintegration services. School for Children with Mental Retardation is the only category which provides vocational rehabilitation services. On an average, less than 45 percent of the total users at SWIs with residential facilities are rehabilitated and/or reintegrated back with their families. Around 53 percent of the SWIs provide follow-up services post reintegration. The most common methods of follow up reported by SWIs includes telephone and in-person meetings. Less

than 25 percent SWIs provide community outreach services for their target population.

Male users across all SWIs were higher in proportion to female users and none of the institutions reported any transgender users. More than 77 percent of the total users across all SWIs were children and adolescent and 17 percent were above 60 years. While most of the SWIs have more than 90 percent occupancy rate, SWIs under the JJ Act reported an occupancy rate in excess of 110 percent. Short-stay home is the only category which reported less than 60 percent occupancy rate across both years.

C. Domain 3: **Mental Health in Primary Healthcare**

Primarily this domain assessed the degree of integration of mental healthcare within primary healthcare facilities in the state. This was accomplished by evaluating the kind of training provided to primary healthcare staff in mental health and understanding the linkages between the primary healthcare facilities and the mental health system, including the availability and prescription rate of psychotropic medicines in physician-based and non-physician based primary healthcare settings. As per definition, non-physician based primary health care clinic includes Sub-centres and physician based primary healthcare clinic includes Primary Healthcare Centres (PHCs). In actuality, the lack of adequate services at these primary healthcare facilities has led to other categories of healthcare facilities such as Additional PHCs, CHCs and Sub-divisional/District Hospitals to deliver primary health care services to the state's population. Consequently, all categories PHIs delivering primary healthcare services were assessed under this domain.

WHO-AIMS Indicator	Indicators	Bihar
	Mental Health in physician-based primary healthcare	
3.1.1	Proportion of undergraduate (M.B.B.S. degree) training hours devoted to psychiatry and mental health-related subjects for medical doctors	**2%**
3.1.2	Refresher training programs on psychiatry / mental health conducted for primary health care doctros	✗
3.1.3	Assessment and treatment protocols for key mental health conditions are available in physician-based primary healthcare clinics	✗
3.1.4	Primary health care doctors make referrals to mental health professionals	✓
3.1.5	Primary health care doctors are authorized to prescribe psychotropic medication	✓
	Mental Health in non-physician-based primary healthcare	
3.2.1	Proportion of undergraduate (B.Sc. Nursing degree) training hours devoted to psychiatry and mental health-related subjects in nursing school.	**4%**
3.2.3	Refresher training programs on psychiatry / mental health conducted for primary healthcare nurses	✗
3.2.4	refresher training programs on psychiatry / mental health conducted for non-doctor/non-nurse primary healthcare workers.	✓
3.2.5	Assessment and treatment protocols for key mental health conditions are available in non-physician-based primary healthcare clinics	✗
3.2.6	Referrals are made by non-physician-based primary healthcare clinics	✗
3.2.8	Primary health care nurses are authorized to prescribe psychotropic medication	✗
3.2.9	Non-doctor/non-nurse primary healthcare workers are authorized to prescribe psychotropic medication	✗

Mental health in primary health care

Both physicians-based and non-physician based primary health care clinics are present in Bihar, but they do not deliver any form of mental healthcare services. None of the Sub-centres or PHCs have any assessment and treatment protocols for key mental health conditions. In terms of focus on mental health

in primary healthcare being delivered by Additional PHCs, CHCs, Sub-divisional Hospitals and District Hospitals without DMHP centres, none of these facilities have any assessment and treatment protocols for key mental health conditions. Around 76 percent of all PHIs, including DMHP centres at District Hospitals, GMCHs and the Mental Hospital, receive referrals from CHCs and PHCs. However, none of the primary healthcare institutions make at least one such mental health care referral per month to PHIs providing secondary or tertiary care. None of the PHIs providing secondary or tertiary care reported any referrals from non-physician based primary health care clinics or Sub-centres. Around 29 percent of total number of PHIs providing mental healthcare, reported interaction with primary healthcare doctors and other staffs through in-person or telephonic meetings on matters pertaining to persons with mental health problems.

Training in mental health care for primary care staff

Two percent of the training for medical doctors during their MBBS course is devoted to mental health, in comparison to 4 percent for nurses under the B.Sc Nursing degree training. In terms of refresher training, 0 percent of primary health care doctors, nurses and other primary health care staff have received at least two days of refresher training in mental health in the last two years.

Prescription and availability of psychotropic drugs in primary health care

Only recognized medical professionals such as a physician with a MBBS degree or equivalent AYUSH professionals are allowed to prescribe psychotropic medication in a primary healthcare setting. Nurses or non-doctor/non-nurse primary healthcare workers are not allowed to prescribe psychotropic medication by law. Even though primary health care doctors can provide treatment for common mental health problems and prescribe psychotropic drugs without restrictions, the rate of such prescription at PHCs and CHCs is almost non-existent. As for availability of psychotropic medications, none of the sub-centres, PHCs or CHCs have at least one psychotropic medicine of each therapeutic category (anti-psychotic, antidepressant, mood stabilizer, anxiolytic, and antiepileptic). Anti-epileptic medication is the only therapeutic category under which medications have been included for PHCs and CHCs within Bihar's Essential Drug List (2018).

D. Domain 4: **Human Resource in Mental Health**

This domain evaluated the availability of various kinds of human resource employed for mental health including, Medical doctors, Nurses, Psychiatrists, Psychologists, Occupational Therapists, Social Worker or other Mental Health Workers and some aspects of professional training provided under different courses and degrees at medical colleges and other educational institutions in the state. Availability of user, consumer or family associations or any other non-governmental organization (NGO) involved in mental health was also investigated to gauge the range of their activities in the mental health system.

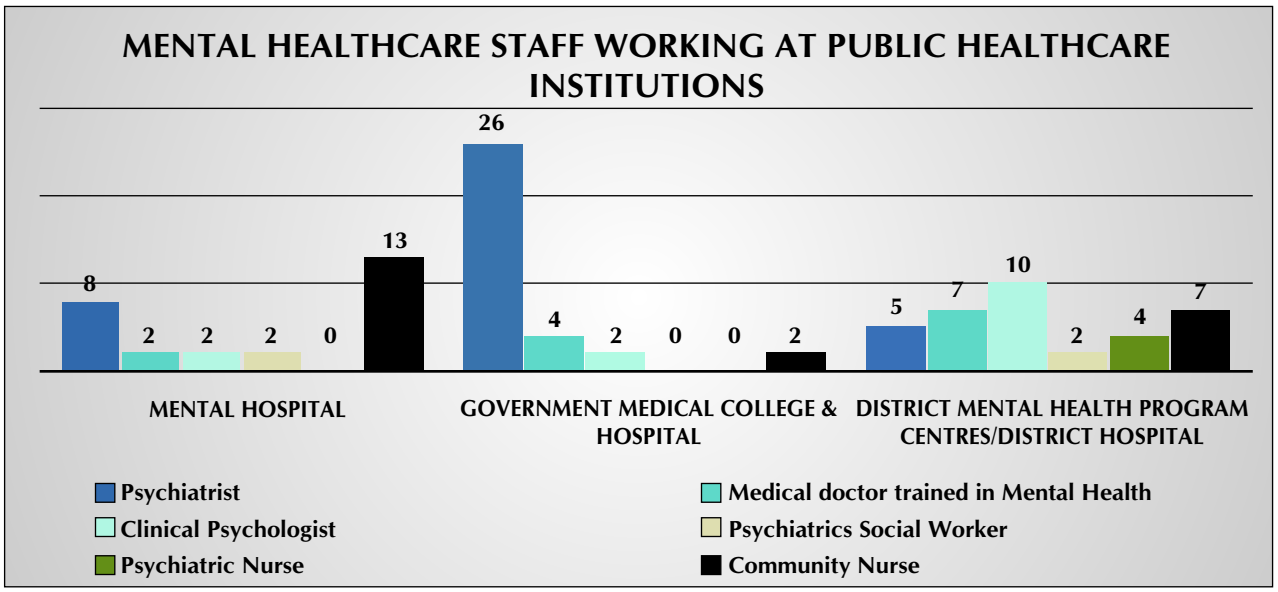
WHO-AIMS Indicator	Indicators	Bihar
4.1	**Availability of various types of Human Resources employed in Metal Health**	
	Psychiatrists	✓
	Other medical doctors, not specialized in psychiatry	✓
	Psychiatric Nurses	✓
	Other Nurses	✓
	Psychologist	✓
	Psychiatric Social Workers	✓
	Occupational Therapists	✓
4.2	**Kinds of Mental Health Professionals being trained/graduated**	
	Psychiatrists	✓
	Other medical doctors, not specialized in psychiatry	✓
	Psychiatric Nurses	✗
	Other Nurses	✓
	Psychologist	✓
	Psychiatric Social Workers	✗
	Occupational Therapists	✗
4.3	**User/Consumer, Family associations and NGOs involved in Mental Health**	
	Availability of User/Consumer and Family associations involved in mental health	✗
	Availability of NGOs working for mental health	✗
	Government provides economic support for user/consumer and family associations	✗

Public Health Institutions (PHIs)

The total number of human resources working for mental health at all PHIs or government-run health facilities, per 100,000 general population, is 0.22. [29]The breakdown, according to profession, is as follows: 0.03 psychiatrist, 6.6 medical doctors not specialized in psychiatry, 0.007 medical doctors with 1-year training in mental health, 0.01 clinical psychologist, 0.003 psychiatric nurse, 0.003 psychiatric social worker, 0.003 occupational therapist and 0.01 other health or mental health workers (including auxiliary staff, non-doctor/non-physician primary health care workers, health assistants, medical assistants, professional and paraprofessional psychosocial counsellors). Out of the total number of psychiatrists available in the state, 6 percent are employed only in government-administered, 63 percent are working for-profit mental health facilities and private practice and 31 percent are working at government-administered facility and private practice.

[29] Figures on total population of Bihar in the year 2018 are based on the estimates by the Economic Survey of Bihar 2018-19.

Figure 9.1 Mental Healthcare Staff classified by work place



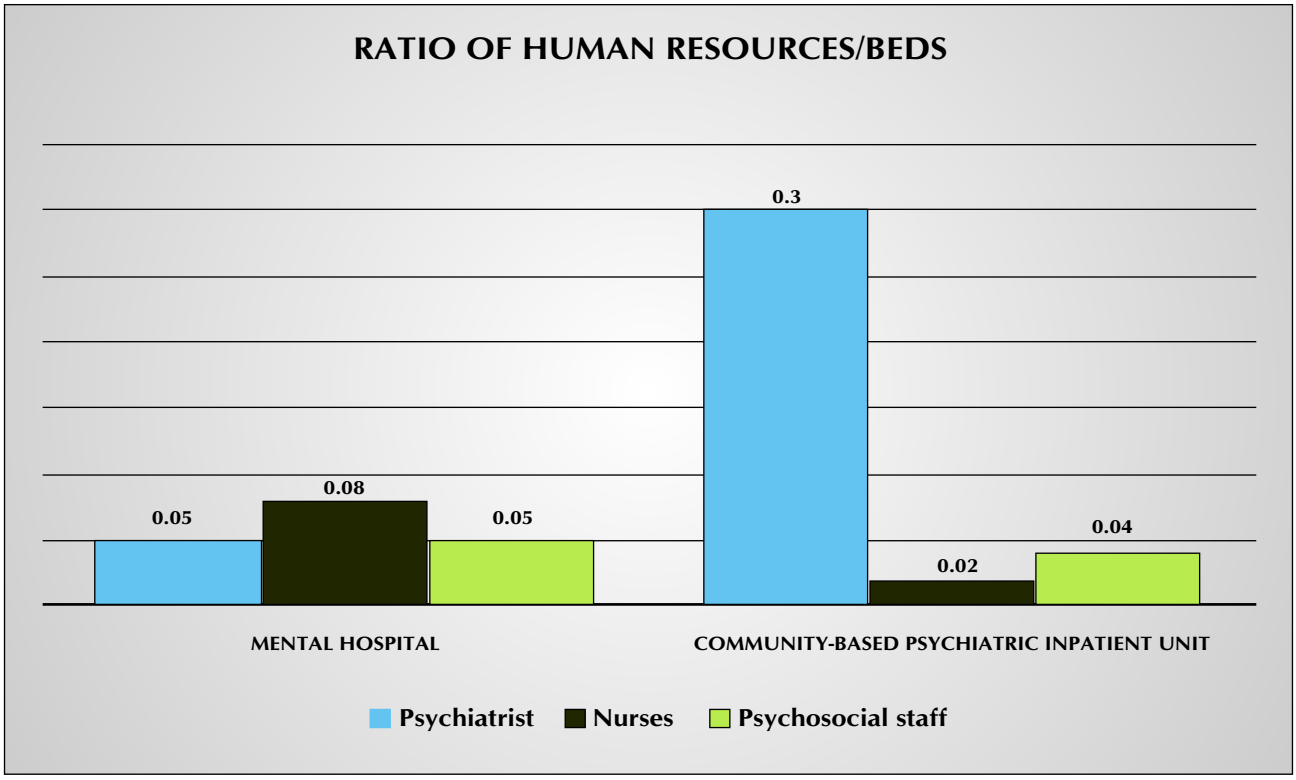
For categorization of mental health professionals by work place, 8 psychiatrists work at the mental hospital, 30 psychiatrists work at mental health outpatient facilities located at DMHP centres and GMCHs and 15 psychiatrists work at community-based psychiatric inpatient facilities located at GMCHs. Only 5 out of 11 DMHP centres have a psychiatrist appointed at their respective facilities in the districts of Banka, East Champaran, Muzaffarpur, Purnea and Rohtas. In case of GMCHs, there are a total of 26 psychiatrists that have been appointed at different GMCHs (n = 9).At GMCHs, the mental health outpatient facility and community-based psychiatric inpatient unit are located within a single psychiatry department, because of which there is a human resource overlap between the outpatient and inpatient facilities. This was observed at PMCH, NMCH and IGIMS in Patna and JNMC Bhagalpur, where the same mental health professionals provide services at both facilities. There is a similar overlap of all categories of human resources within the outpatient and inpatient facilities at the mental hospital. In the absence of a Psychiatrist at DMHP centres in Buxar, West Champaran, Goapalganj, Kaimur and Vaishali, Medical Doctors trained in mental health are delivering mental health outpatient care. The DMHP Centre in Jamui is the only facility under the DMHP category which does not have a Psychiatrist, or a medical doctor trained in mental health. In total there are 13 medical doctors trained in mental health across all PHIs in the state, out of this 14 are appointed across14 DMHP centres and 2 are appointed at the Mental Hospital.

A total of 13 community nurses work at the inpatient and outpatient facilities at the mental hospital. A total of 9 community nurses work in mental health outpatient facilities located at GMCHs and DMHP facilities.Out of this, total7 community nurses work at DMHP centres in Banka, Buxar, West Champaran, Jamui, Muzaffarpur, Rohtas and Vaishali and2 work at GMCHs including IGIMS in Patna and ANMMCH in Gaya. Under the category of community-based psychiatric inpatient facilities, only IGIMS Patna is reported as having a community nurse appointed at the facility. A total of 13 nurses work at the mental hospital but none of them are specialized in psychiatry. Only 4 Psychiatric nurses are available across all PHIs in the state. They serve as part of DMHP teams located in the districts of Buxar, Gopalganj, Muzaffarpur and Rohtas. None of the mental health outpatient facilities or community-based psychiatric inpatient facilities located at GMCHs have a psychiatric nurse.

As for other mental health professionals, there are a total of 14 clinical psychologists working across all PHIs in the state. For categorization by workplace, 10 work at mental health outpatient facilities at DMHP centres, 2 work at mental health outpatient facilities and community-based psychiatric inpatient units at GMCHs, including, PMCH and IGIMS in Patna, and 2 serve at the Mental Hospital. Psychiatric social workers are only available at mental health outpatient facilities at DMHP centres in the districts of Kaimur (n = 1) and Purnea (n = 1), and at the Mental Hospital (n = 2). Occupational therapists are only available at the Mental Hospital (n = 4) and Psychiatric Social workers are available at the Mental Hospital (n = 2) and DMHP centres (n = 2) in the districts of Kaimur and Purnea.

In terms of staffing, there are 0.3 psychiatrist per bed in community-based psychiatric inpatient units, as compared to 0.04 psychiatrist per mental hospital bed. As for other mental health professionals, there are 0.04 clinical psychologist, psychiatric social worker and occupational therapist per bed in community-based psychiatric inpatient units relative to 0.05 per mental hospital bed, and 0.02 nurses per bed community-based psychiatric inpatient units as opposed to 0.08 nurses per mental hospital bed.

Figure 9.2 Ratio of Human Resources/Beds; Figures on total population of Bihar in 2018 are based on the estimates of the Economic Survey of Bihar 2018-19

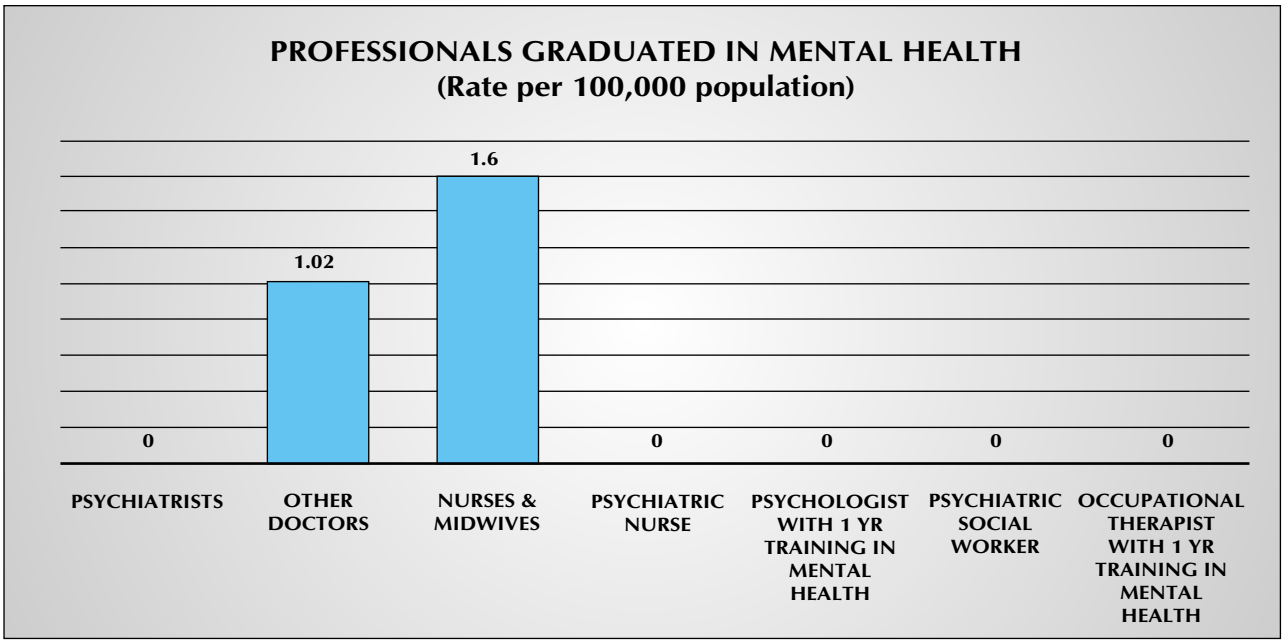


Training Professionals in mental health

The number of professionals graduated in the last year from government-run institutions providing medical education and training in Bihar, per 100,000 general population, is as follows: 0.00 psychiatrists, 1.02 medical doctors, 1.6 nurses and midwives, 0.00 psychiatric nurse, 0.34 clinical psychologists, 0.00 psychiatric social worker and social worker (with atleast 1 year of training in mental health) and 0.00

occupational therapist with atleast 1 year of training in mental health. Currently there is no government-run educational institution that provides academic courses for psychiatric social work, psychiatric nursing and occupational therapy in mental health. None of the mental health staff at Government Medical College and Hospitals, DMHP centres and the mental hospital attended any refresher training on the rational use of psychotropic drugs in the last two years. Psychologists and psychiatric social workers employed at DMHP centres were the only professionals who reported attending refresher training on psychosocial (non-biological) interventions.

Figure 9.3 Professionals graduated in Mental Health from PHIs; rate per 100,000 general population



Healthcare Professionals at Social Welfare Institutions (SWIs)

Out of the total SWIs, 6 percent have a doctor present permanently on site, 35 percent have a part-time doctor, 19 percent have a doctor-on-call for emergencies and 40 percent do not employ any health professional. None of the SWIs have a psychiatrist permanently on site but six percent of the SWIs have a psychiatrist on call. Forty seven percent of the SWIs have a counsellor present at the facility, out of which12 percent are trained in mental health. None of the SWIs have a de-addiction counsellor permanently on site or on call.

Consumer and family associations

There are no consumer associations, family associations or NGOs working in mental health in Bihar. Family association for persons with mental disability are available in the state. None of the SWIs or PHIs reported any interaction with any such associations or NGOs which are involved in mental health. The state government does not provide any economic support to the NGOs, or consumer and family associations for mental health initiatives. There are no NGOs or associations that have been involved in the formulation or implementation of mental health policies, programs or legislation within the past two years.

E. Domain 5: **Public Education and Links with other sectors**

This domain assessed ongoing public education and awareness campaigns on mental health and formal collaboration in the form of laws, administration and programmes between mental health and (other) health and non-health sectors. To understand the interlinkages between these sectors, the overall extent of activities outside the mental health sector that addresses the needs of people with mental health issues was analyzed.

WHO-AIMS Indicator	Indicators	Bihar
	Public Education and awareness campaigns on mental health	
5.1.1	Coordinating bodies for public education and awareness campaigns on mental health exists	✗
5.1.2	Government agencies and Professional associations promote public education and awareness campaigns on mental health	✓
	Links with other sectors: formal collaboration	
5.2.1	Legislative provisions for employment of persons with mental disability exist	✓
5.2.2	Legislative provisions against discrimination at work for persons with mental disorder	✓
5.2.3	Legislative or financial provision for subsidized or prioritized housing for persons with severe mental disorder	✗
5.2.4	Legislative or financial provisions against discrimination in housing for persons with severe mental disorder	✗
5.2.5	Formal collaborative programmes on mental health with their health & non-health agencies/departments	✗
	Links with other sectors: activities	
5.3.1	Programs for providing employment to persons with severe mental disorders	✗
5.3.2	Primary & Secondary schools have part/full-time mental health professionals	✗
5.3.4, 5.3.5	Educational activities (mental health) with police officers, judges and lawyers	✗
5.3.8	Prisons have part/full-time mental health professionals	✗

Public education and awareness campaign on mental health

There are coordinating bodies for public education and awareness campaigns on mental health and mental disorders. PHIs including DMHP centres across 11 districts and GMCHs, as well as professional associations such as the Bihar chapter of the Indian Psychiatric Association and state institutions such as the Bihar State Legal Services Authority have promoted public education and awareness campaigns in the last five years. These campaigns have targeted the following groups: general population, children, adolescents, and persons in custodial institutions. In addition, there have been education and awareness campaigns for professional groups including primary healthcare providers, teachers, jail administrators and members of Panchayati raj institutions. No efforts have been made to target Informal Providers or Alternate Practitioners.

Legislative and financial provisions for people with mental disorders

There are legislative and financial provisions in the state to provide support to persons with disability,

which includes persons with locomotor disability or cerebral palsy; vision, speech or hearing impairment; all types of mental disorders; any of the above conditions arising because of acid attack. In respect of employment for persons with disabilities, the state government has implemented 4 percent reservation for this category of persons with disability, in all forms of employment at state-owned institutions. As for education, there is 4 percent reservation in admission for persons with disability at all educational institutions that are state-owned or are receiving any state support. This affirmative action was enforced by the state government in December 2017 in view of the legislative provisions against discrimination at work for persons with disabilities under the Rights of Persons with Disabilities Act (2016) and Rules.

For financial support, persons with disability who are between 18 and79 and belong to families who fall below the poverty line are eligible for monthly pension under the Indira Gandhi National Disability Pension Scheme. In addition, there is a state scheme for providing monthly pension to any person with disability, who are above 40. The state government also provides financial support to children with disability for all levels of education through schemes covering both financial aid and subsidized loans. However, there are no legislative or financial provisions concerning subsidized housing, or state provided housing for persons with severe mental disorders, including schizophrenia, bipolar disorder and major depression.

Link with other sectors

Both intradepartmental and interdepartmental linkages within the mental health system of Bihar are weak. The Department of Health, which is responsible for the proper functioning of the mental health system in the state, does not have any formal collaborations pertaining to mental health with other departments, such as, Social welfare, Education and Home (Criminal Justice).Within the Health department, the various divisions which are responsible for primary healthcare, reproductive health, child and adolescent health, and substance abuse do not have any formal collaborations with the mental health team that sits at the Bihar State Health Society.

None of the PHIs or SWIs have access to programmes outside the facility that provide employment for users with mental disorders. Zero percent of primary and secondary schools run by the state government have a part-time or full-time mental health professional such as psychologist, psychiatric social worker or psychiatric nurse. Only Jawahar Navodaya Vidyalaya, that are residential schools run by the Central Government, have counsellors appointed at their facilities. A few programmes including Seher, Prayatna and Tarang have been implemented by non-governmental organizations for introducing school-based activities to promote mental health and to prevent mental disorders at state government-run secondary schools and Jawahar Navodaya Vidyalaya schools.

The prisons in Bihar, including Central prisons, do not have regular visits from psychiatrists, as there is no formal collaboration between public health institutions and custodial institutions. PMCH Patna and JNMC Bhagalpur were the only two PHIs that reported contact with users from custodial institutions for both outpatient and inpatient mental health services. According to a survey conducted by the Bihar State Legal Services Authority in 2016, across all prisons in Bihar, prisoners with mental health problems hardly have access to mental healthcare. As for training of human resource in the criminal justice system, no educational activities on mental health have been conducted by the state for police officers, judges or lawyers in the last five years.

F. Domain 6: **Monitoring and Research**

This domain examined the systems and process in place for monitoring the mental health system by the state government. The extent and content of mental health research in Bihar was also reviewed as part of this exercise.

WHO-AIMS Indicator	Indicators	Bihar
	Monitoring Mental Health Services	
6.1.1	A formally defined minimum data set items to be collected by all mental health facilities	✗
6.1.2	Mental health information system exist in mental hospitals	✓
6.1.3	Mental health information system exist in all community-based psychiatric inpatient units	✗
6.1.4	Mental health information system exist in all mental health outpatient units	✗
6.1.5	All mental health facilities transmit data to government health department	✗
6.1.6	Report on mental health services by government health department exists	✗
	Mental Health REsearch	
6.2.1	Mental health professionals in the state conduct mental health research	✓
6.2.2	Proportion of indexed publications on Bihar that are on mental health in the last five years	1%

There is no formally defined list of individual data items that ought to be collected by all mental health facilities. However, there is a formal defined list of individual data items that is routinely collected by the mental hospital and it includes information on the number of beds, number of outpatient users treated, number of inpatient admissions, number of involuntary admissions, duration of stay and diagnoses. The mental health outpatient facilities at DMHP centres also follow a formally defined list provided by the Bihar State Health Society which includes information on number of outpatient users treated, diagnoses, number of outreach camps and awareness programmes organized.

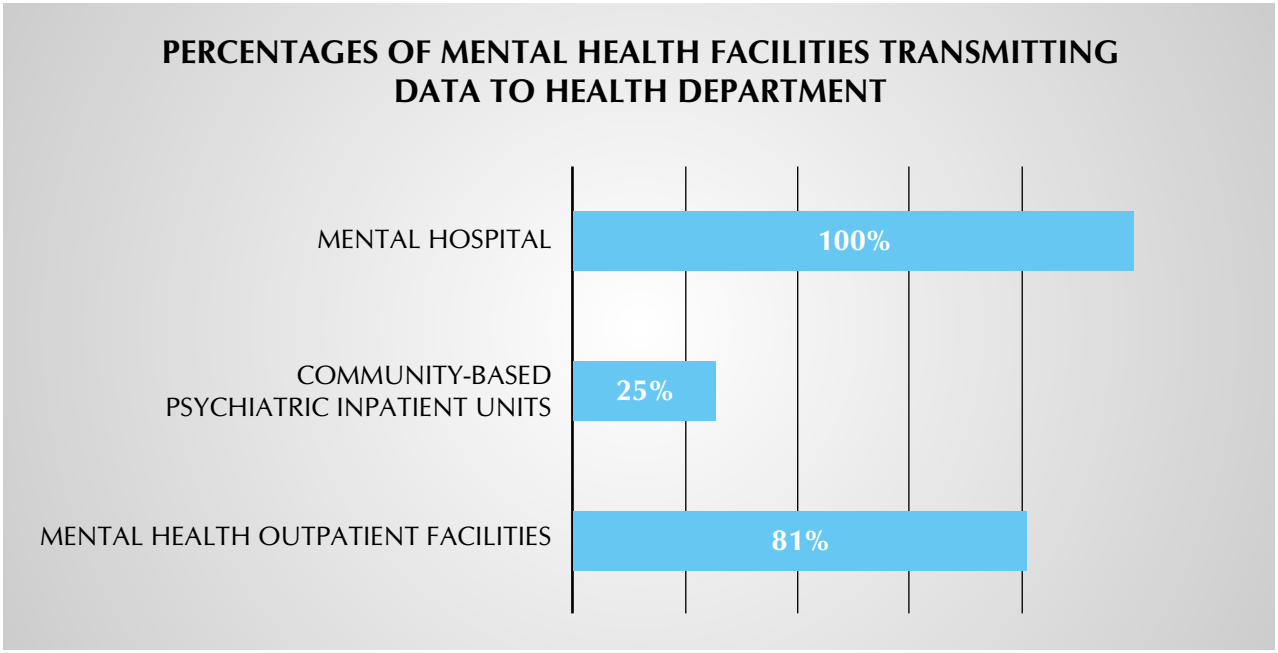
No such formally defined list exists for Government Medical College and Hospitals, however 95 percent of the mental health outpatient facilities at GMCHs reported routinely collection of data on users treated and diagnoses. Zero percent of the mental health outpatient facilities collect data on number of contacts per user. Seventy-five percent of community inpatient units at GMCHs reported routinely collection of data on number of inpatient admissions, number of involuntary admissions, duration of stay and diagnoses.

Figure 10.1 Data collection by all Mental Health Facilities

PERCENTAGE OF MENTAL HEALTH FACILITIES COLLECTING AND COMPILING DATA BY TYPE OF INFORMATION			
	MENTAL HOSPITAL	COMMUNITY BASED PSYCHIATRIC INPATIENT UNIT	MENTAL HEALTH OUTPATIENT FACILITIES
Number of beds	100%	75%	—
Number of inpatient admission/users treated at outpatient	100%	75%	64%
Number of day spent/user contact at outpatient	100%	50%	0%
Number of involuntary admission	0%	0%	—
Number of users restrained	0%	0%	—
Diagnosis	100%	75%	73%

The mental hospital regularly transmits data from its inpatient and outpatient facility to the government health department. But, only 25 percent of the community-based psychiatric inpatient unit and 81 percent of the mental health outpatient facilities regularly report data to the health department. No report has been produced using the data transmitted to the health department.

Figure 10.2Transmission of facility data to Health Department



Less than 15 percent of psychiatrists working at public health institutions have been involved in mental health research in the last five years. No other category of mental health professionals working at PHIs have conducted any kind of mental health research in the last five years. Around one percent of indexed health publications on Bihar in the last five years are on mental health. Mental Health research in Bihar is focused on non-epidemiological clinical/questionnaires assessments of mental disorders; services research; policy and programmes; and psychosocial interventions.

Around 95 percent of SWIs collect and compile data in respect of infrastructure, finance, administrative records, users admitted and discharged, and medical and legal records of users. The majority of SWIs (88 percent) regularly transmit data to the district-level administration or the Social Welfare Department.

DISCUSSION

Systemic barriers such as lack of law, policy and program implementation, inadequate finances, delays in release of allocated state funds, lack of convergence in efforts between the state departments, and low institutional capacity and unskilled human resources result in delivery of poor quality of services to persons in need of mental healthcare and social protection within the state. The state health and social welfare institutions only have limited success in catering to the demand side of the system and delivering equitable, accessible and quality services to its population.

Mental Health Policy, Legislative Framework and Finance

Due to non-implementation of the Mental Healthcare Act (2017), the Mental Health System in Bihar does not have a formal structure in place. Currently, there is no statutory authority to regulate and monitor mental health service delivery and because of weak interlinkages between the state human rights mechanism and the mental health sector, the care and protection of persons with mental health problems has been fairly neglected in the state. This gap has been addressed to a limited extent by the Bihar State Legal Services Authority through its schemes for providing legal aid to persons with mental health problems in order to protect them from exploitation, abuse and discrimination, as well as connect them to social welfare benefits and entitlements. The district legal services institutions provide free legal services to persons at both medical facilities and custodial institutions.

In relation to mental health financing, low per capita income and high poverty rate relative to the national average, sets the affordability of healthcare as a key issue, especially in respect of the socio-economically disadvantaged population. The state government has continually allocated more resources towards social services and the per capita expenditure on social services in the state has increased from Rs.1,878 in 2011-12 to Rs.3,767 in 2016-17. But the current allocation of state funds towards health and social welfare services is still not proportionate to the needs of its existing population. While these two state departments are the major providers of social services in Bihar, the budget estimates for 2019-20 saw only an allocation of 5.03 percent and 6.84 percent of the total state budget portfolio, for the Health Department and Social Welfare Department, respectively. In 2017-18 the actual expenditure of the Health Department was Rs.6243.17 crore and for the Social Welfare Department it was Rs. 5837.28 crore.

A limited investment in the mental health system in Bihar has led to a substantial gap between the need for treatment and its availability, as is also reflected in the national estimates for treatment gap (74-90 percent) by the National Mental Health Survey (2015-16). High treatment gap for MNS disorders is greatly influenced by factors such as low mental health literacy, high OOP expenditure and poor quality of care associated with mental health. Additionally, low mental health literacy and awareness can also lead to stigma and discrimination towards persons with MNS disorders and their families in the state. Besides, these individuals bear a high economic burden related to mental healthcare which can include medical treatment costs and expenses on cultural and religious practices for the treatment of MNS disorders, which is also influenced by the factor of low levels of mental health awareness in the state. The predominant role of informal providers in provision of primary care is already well recognized within

Bihar, with proximity being the main reason for this reliance. Limited availability of community mental healthcare services within rural areas of the state can add on to this reliance on informal providers for providing care and treatment for mental health problems.

Mental Health Services and Mental Health Human Resource

Currently, mental healthcare at PHIs is available in 17 out of 38 districts of Bihar. This depicts a wide distribution of mental health services across the state with an increase in rural access of mental health services because of the implementation of the DMHP programme in the last five years. Organization of regular mental health sessions and camps by the DMHP team within the community, custodial institutions, educational institutions and primary healthcare facilities has contributed to improved access for rural users, as is evident by increase in total number of rural users across all PHIs providing mental healthcare. However, the highest concentration of mental health professionals continues to be in and around the capital city of Patna, especially for a high concentration of psychiatrists with private clinics around this geographical area. Despite the state government's best efforts to address the barrier of unavailability of mental health professionals at PHIs in other districts, the human resource crunch continues to serve as a challenge. This is not only because of the lack of resource allocation, or a faulty approach in governance, but for the skewed supply-side factors pertaining to creation of mental health human resource, which significantly contribute to the unavailability of mental health professionals. Only Patna Medical College and Hospital (GMCH) and Katihar Medical College and Hospital, which is a private institution, offer the course for MD in Psychiatry in the entire state, with a total of two and one recognized seats, respectively. None of the medical institutions offer any courses on psychiatric nursing, psychiatric social work and other courses related to mental health. Various private and public colleges offer courses in Psychology, but limited colleges offer a degree in clinical psychology. Accordingly, there is an urgent need for supply-side interventions to address these human resource barriers in the mental health sector through introduction of more courses and training on mental health at medical institutions. Promotion of consumer and family associations in the mental health sector can further add to the mental health human resource in the state. These associations can serve as advocacy groups, provide psychosocial support to persons with mental health problems, conduct mental health research and make valuable contributions to improving the mental health system in the state.

While the mental health outpatient facilities are available at PHIs in all 17 districts, the community-based psychiatric inpatient facilities are available only at four PHIs, situated within two districts of the state (Patna and Bhagalpur). Most of the mental health professionals providing care at GMCHs and DMHP centres refer cases that require long-term or specialized treatment to mental healthcare facilities outside the state. This highlights the limited capacity of the mental health system of Bihar to provide quality mental health services to such a sizable population. Within Bihar, the burden falls on the mental hospital for both inpatient and outpatient care and treatment, where patients travel to from all parts of the state. Considering that the mental hospital constitutes the principal institution for mental healthcare in the state, the need for expansion of community-based mental health services is essential. This involves both, the expansion of DMHP centres across all districts, and provision of more community-based psychiatric inpatient facilities and setting-up of aftercare facilities within the community. In addition, if primary healthcare institutions provide basic mental healthcare services, then the burden of care with secondary

and tertiary level PHIs in the state can be reduced. One way to address this can be through organization of mobile outpatient assistance units, as they can cover distant areas and improve access to mental health services. The DMHP programme provides for mobile outpatient teams to be established at all DMHP centres. The implementation of this provision needs to be expedited across all districts in the state.

In respect of access to and use of psychotropic drugs, the main barriers are availability, distance and cost. The GMCHs do not provide free access to psychotropic drugs (more than 80 percent of the cost subsidized), but drugs can be bought from pharmacies within the facility at relatively subsidized costs. At the primary and secondary level of healthcare, there is a cycle between lack of demand for treatments including use of psychotropic drugs for MNS disorders, by both, doctors and patients. Only district hospitals with DMHP centres (n = 11) provide free access to psychotropic drugs and the rest of the 27 district hospitals do not have this provision in place. Even in case of District Hospitals with DMHP centres, factors such as limited availability of psychiatrists and medical officers trained in mental health, serve as technical barriers in prescription of psychotropic drugs. Further, the unavailability of mental health professionals and psychotropic drugs at the majority of Districts Hospitals, Primary Healthcare Centres (PHC)/Additional PHCs and Community Healthcare Centres significantly contributes to low rates of access to and use of psychotropic drugs within the state. Systems need to be put in place to ensure availability of psychotropic drugs at these facilities and train medical doctors in rational use of/prescription of psychotropic drugs.

Limited availability of psycho-social services for mental healthcare at PHIs serves as another barrier in uptake of care and treatment within the MHS of Bihar. The condition is especially alarming in the case of GMCHs category, under which only 2 GMCHs that are located in Patna, namely, Indira Gandhi Institute of Medical Sciences and Patna Medical College and Hospital, have a clinical psychologist to address the psychosocial needs of inpatient and outpatient users. The other 7 GMCHs, where a clinical psychologist is not available, Junior or Senior residents who are appointed to assist the Psychiatrist cum Assistant Professor/Associate Professor/Professor at the Psychiatry department render psychosocial services to the users. On the other hand, the majority of facilities under the DMHP category provide psychosocial users at the facilities, as well as within the community, through camps organized by the team. The Mental Hospital is the only PHI which in addition to psychosocial services also caters to other rehabilitative needs of the usersthrough provision of occupational therapists and legal counsellors at the facility.

Inadequate implementation of the Rights of Persons with Disabilities Act (2016) has led to limited availability of long-term services for children and adults with mental and physical disability. It is known that persons with severe forms of mental disorders require care and treatment for longer periods and have special psychosocial and rehabilitative needs. However, except for the Mental hospital, there are no PHIs or SWIs whose primary purpose is to provide long-term treatment for MNS disorders. In respect of community residential facilities, thereare no homes or residential institutions that are meant to serve persons with MNS disorders or provide aftercare services for persons requiring intensive medical interventions. Further, there are no day care institutions for persons with MNS disorders. The only day care institutions that are available include schools for children with mental and physical disabilities. There is an urgent need to establish residential institutions for persons in need of long-term treatment for mental disorders in the state.

Mental Health in Primary Healthcare

As healthcare facilities that form the primary tier of the state's healthcare delivery system are weak and fragmented, primary care is mostly being delivered by tertiary care institutions which includes District Hospitals and GMCHs. Currently, mental healthcare is not provided at PHCs or CHCs in the state and mental health outpatient clinics are only available at District Hospitals, GMCHs and the Mental Hospital. There is a need to strengthen the primary tier of the healthcare delivery system and integrate core mental healthcare in non-specialised health settings by professionals working at CHCs, PHCs and Sub-centres as they are required to provide community-based care. If both medical and non-medical healthcare professionals at these institutions can provide brief psychotherapeutic interventions for common mental disorders, as well as community-based recovery-oriented interventions for persons with chronic mental disorders, then the coverage of mental health services can be increased in the state and the substantial treatment gap in respect of mental disorders can be addressed to some extent. This integrated model will address the common concern of stigmatization associated with specialized settings for psychiatric care and substantially decrease the treatment burden on tertiary care institutions by task shifting to primary healthcare providers. As a result of providing training to primary healthcare providers to enable detection, diagnosis, treatment and monitoring of individuals with mental disorders, this model will ultimately reduce the high care giver burden associated with mental disorders. Such training of primary healthcare providers will also enable detection of users in need of specialized care who can then be referred to tertiary care institutions with mental health specialists.

Interlinkages between Mental Health and other sectors

The number of SWIs under the JJ Act, Protection of Women from Domestic Violence Act (2005) and Immoral Traffic (Prevention) Act (1986) are extremely limited. Under the JJ Act, there are no Observation Homes, Special Home or Open Shelters meant for girls in conflict with law or in need of care and protection. The majority of the SWIs are only available for boys or men. A home for destitute women, including women with mental health problems known as Uttar Raksha Grih, that operates under the jurisdiction of the Social Welfare Directorate is catering to the needs of minor girls under the JJ Act. In some districts, minor girls who are in conflict with law are also sent to Short-stay homes that are run by the WDC. The Children homes, Short-stay homes, and Uttar Raksha Grih, that are available, cannot adequately cater to the needs of juvenile girls in conflict with law, women with mental health problems, victims of gender-based violence and all other groups of women who are vulnerable or in need of care and protection within the state. The services aimed at rehabilitation and reintegration of homeless individuals are also insufficient in relation to the demand for such services. There are no government programmes that cater to the mental health needs of vulnerable groups such as transgender people, victims of human trafficking for commercial sexual exploitation, orphaned children with mental health problems and elderly care-givers for persons with MNS disorders. There is an urgent need to establish more SWIs, including both residential and day care facilities, as required under the aforementioned laws. It is essential to provide quality mental healthcare services at these institutions, given the vulnerable status of the population that they cater to. If mental healthcare services cannot be provided at these facilities, then the SWIs need to be connected to the nearest PHI providing mental healthcare services. This can be achieved through formal collaborations between the Department of Health and Department of Social

Welfare. Both these departments play a role in providing care and treatment to persons with mental health problems and disability. This will increase the uptake of mental healthcare services and the associated social welfare benefits being provided by the state government. Partnerships between these departments should further be extended to include the Education Department, custodial institutions within the criminal justice system and other governmental and non-governmental organizations that are employed in providing services to vulnerable sections of society.

Monitoring and Research in Mental Health

There is no monitoring system in place to detect and prevent failures in the effective functioning of the mental health system in the state. Good practices for monitoring, evaluation and research in mental health in the state can help guide and control effective implementation of reform policies, strengthening mental health human resources, providing quality mental health services and leading coordinated efforts for mental health promotion, prevention, care and rehabilitation. The Health Management Information Systems (HMIS) has been established in the state, but it does not include any metrics related to the mental health system of Bihar. The integration of mental health components to this data collection system can effectively support planning, management and decision making at health facilities providing mental healthcare.

POLICY RECOMMENDATIONS

Domain 1:Policy and Legislative Framework:

State finances and Afford ability of care; Human Rights Policies

- Establish a Technical assistance unit for planning and implementation of policy interventions directed towards strengthening the MHS in accordance with national policy and legislative framework and to this end, allocate proper resources.
- The State urgently needs to enact the State Rules for implementation of the Mental Healthcare Act (2017). This will entail laying down the institutional framework under the Act by establishing: (a) the State Mental Health Authority, District Mental Health Authority(s), Mental Health Review Board and the State Mental Health Fund; (b) the processes for implementation of the Rights of Persons with Mental Illness.
- All relevant actors from the public health and judicial system need to be trained on the Mental Healthcare Act (2017).
- The state government needs to mainstream all state expenditure on mental health through the State Mental Health Fund.
- The state government needs to develop a formal collaboration with human rights institutions and facilitate inspection and review of mental healthcare services at PHIs and SWIs by these institutions. To ensure successful implementation of the MHA (2017), Mental Healthcare professionals and all other actors who are part of the MHS need to be trained on the role of human rights in mental healthcare.

Domain 2: Mental Health Services

- Strengthen the existing DMHP centres by ensuring utilization of central funds for infrastructure development and human resource procurement, followed by expansion of DMHP to other districts.
- Strengthen psychiatry departments at GMCHs in respect of providing accessible quality mental healthcare. This includes both outpatient and inpatient services. GMCHs without a functional inpatient department require immediate intervention.
- Strengthen the Mental Hospitals in its ability to provide accessible quality mental healthcare to a steadily increasing number of patients of all ages. Specialized mental health services for children and adolescents and the geriatric population needs to be established.
- Establish day treatment centres and community residential facilities to provide care for persons with mental health problems.

Domain 3:Human Resource

- At the outset, establish courses for MD in Psychiatry, M.Sc in Psychiatric Nursing, Clinical Psychology and Psychiatric Social Work at GMCHs and BIMHAS.

- Recruit clinical psychologist, psychiatric nurse, psychiatric social worker and community nurse as part of the psychiatry department at GMCHs.
- Expedite the recruitment process under DMHP by filling the vacancies in DMHP teams at functional DMHP centres and recruit new mental health professionals for the upcoming DMHP centres.

Domain 4:Mental Health in Primary Healthcare

- Develop assessment protocols for primary healthcare facilities and train health professionals at CHCs, PHCs and Sub-centres in mental healthcare which includes the prevention, diagnosis, treatment and follow-up of various mental health conditions, including referrals to specialists and diagnostic services.

Domain 5:Public education and link with other sectors

- Incentivize local NGOs to work in the mental health space in the state, specifically to reduce stigma and discrimination associated with mental health conditions, provide short-term and long-term mental healthcare services, as well as rehabilitation and re-integration services.
- Strengthen DMHP centres, GMCHs and the Mental Hospital to conduct regular public education and awareness campaign on mental health in all districts.
- Establish interlinkages between custodial institutions and PHIs that provide mental healthcare to ensure the protection and care required by persons with mental health conditions residing at custodial institutions.
- Establish interlinkages between PHIs and SWIs for ensuring quality mental healthcare to residents/beneficiaries across SWIs.
- Create posts for mental health counsellors at all government schools and colleges and incentivize private educational institutions to follow suit.

Domain 6: Monitoring and Research

- Create one master list for data items pertaining to mental healthcare which is to be collected from all three categories of public healthcare institutions- DMHP centres/District Hospital; GMCHs; and the Mental Hospital.
- Integrate this list with HMIS that is operative in the state.
- Promote research activities in various aspects of mental healthcare by mental healthcare professionals working at PHIs.

REFERENCES

Bihar State Legal Services Authority. Report on Prisons of Bihar (2016).

Baxter, Amanda J, et al. "Prevalence of mental, neurological, and substance use disorders in China and India: a systematic analysis." Lancet Psychiatry 2016; 3: 832–41. August 12, 2016 http://dx.doi.org/10.1016/S2215-0366(16)30139-0.

Campbell, Jacquelyn C, et al. "Health effects of Intimate Partner Violence on Women and Children". The Psychiatric Clinics of North America. 20 (2): 353-374. The Johns Hopkins University School of Nursing, Baltimore, Maryland, U.S.A.

Cheng, Hui G, et al. "Social correlates of mental, neurological, and substance use disorders in China and India: a review". Lancet Psychiatry (2016); 3: 882–99. Published Online August 12, 2016. http://dx.doi.org/10.1016/S2215-0366(16)30166-3

Chandra S, Patwardhan K. Allopathic, AYUSH and informal medical practitioners in rural India - a prescription for change. J Ayurveda Integr Med. 2018;9(2):143-150.

Dan Chisholm et all; Scaling-up treatment of depression and anxiety: a global return on investment analysis ;Lancet Psychiatry (2016); 3: 415–24.

Dersh, Jeffery, et al. (2002) "Prevalence of Psychiatric Disorders in Patients with Chronic Work-Related Musculoskeletal Pain Disability". J Occup Environ Med. 2002; 44:459 –468)

Ducat, Lee, et all. "The Mental Health Comorbidities of Diabetes". JAMA. 2014 Aug 20; 312(7): 691–692.

doi: [10.1001/jama.2014.8040].

Engle, Patrice. "The Role of Caring Practices and Resources for Cate in Child Survival, Growth and Development: South and Southeast Asia". (1999). Asian Development Review, vol. 17 nos. 1,2, pp. 132-167

Finance Department, Government of Bihar. Economic Survey of India (2018-19).

Funk, Michelle, Drew, Natalie, Freeman, Melvyn, Faydi, Edwige& World Health Organization. (ý2010)?. "Mental health and development: targeting people with mental health conditions as a vulnerable group"ý. Geneva: World Health Organizations. http://www.who.int/iris/handle/10665/44257.

Government of India, Ministry of Health and Family Welfare. (1984). "National Mental Health Programme". https://www.nhp.gov.in/national-mental-health-programme_pg.

Government of India, Ministry of Health and Family Welfare. (2015-16). "National Family Health Survey-District Level Household Survey- Bihar". http://rchiips.org/nfhs/pdf/nfhs4/br_factsheet.pdf

Government of India, Ministry of Health and Family Welfare. (2014). "National Mental Health Policy". https://www.nhp.gov.in/sites/default/files/pdf/national%20mental%20health%20policy%20of%20india%202014.pdf.

Government of India, Technical Committee, constituted by the National Human Rights Commission, to evaluate mental health services in India. "Report of the Technical Committee on Mental Health- Mental Health Care in India- Old Aspirations.....Renewed Hope". (2016).

Government of India, Ministry of Health and Family Welfare, Ayushman Bharat, Guidelines on Pradhan Mantri Jan Arogaya Yojna (PM-JAY). Available at https://pmjay.gov.in/download-documents.

Government of India, Ministry of Health and Family Welfare. Rural Health Statistics (2017).

Ghosh.S, Guha-Khasnobis, Husain Z. (2018). "Morbidity and Health Seeking Behaviour in Bihar, 2004-2014" Working paper. CHP-01/2018. The Centre for Health Policy, Patna, Bihar.

Ghosh.S, Guha-Khasnobis., Srishti, A. (2018). "Demographic Profile of Bihar." Working paper. CHP-02/2018. The Centre for Health Policy, Patna, Bihar.

Gururaj G, et al. National Mental Health Survey of India, 2015-16: Summary. Bengaluru, National Institute of Mental Health and Neuro Sciences, NIMHANS Publication No. 128, 2016.

Hasson F, et al. "Research guidelines for Delphi survey technique". J Adv Nurs. (October 2000; 32 (4): 1008-15.

Heijmens Visser et al. "Predictors of psychopathology in young adults referred to mental health services in childhood or adolescence".Br J Psychiatry. 2000 Jul;177:59-65.

Indian Council of Medical Research, Public Health Foundation of India, and Institute for Health Metrics and Evaluation. (2017) "India: Health of the Nation's States - Level Disease Burden Initiative". New Delhi, India: ICMR, PHFI and IHME; 2017.

Kleinert, Sabine. Horton, Richard. "Adolescent health and wellbeing: a key to a sustainable future". The Lancet Commissions, Volume 387, Issue 10036, p2355-2356. (June 11, 2016)

Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. Lancet. 2002;360:1083-1088.

Lindelow, Magnus. Wagstaff, Adam. (2003) "Health Facility Surveys: An Introduction. World Bank Policy Research Working Paper No.2953. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=636315.

Mason, John. Hunt, Joseph. Parker, David. Jonsson, Urban. "Investing in Child Nutrition in Asia". (1999). Asian Development Review, vol. 17, nos. 1,2, pp. 1-32

Mitchell, Alex J, et al. (2011). "Prevelance of depression, anxiety, and adjustment disorder in oncological, hematological, and palliative-care settings: a meta-analysis of 94 interview-based studies". Lancet Oncol 2011; 12: 160–74. Published Online January 19, 2011 DOI:10.1016/S1470- 2045(11)70002-X.

Mumford DB, Saeed K, Ahmad I, Latif S, Mubbashar M. Stress and psychiatric disorder in rural Punjab. A community survey. British Journal of Psychiatry 1997;170:473-8.

Office of the Registrar General & Census Commissioner, India. Ministry of Home Affairs, Government of India. http://www.censusindia.gov.in/2011census/Disability_Data/Disability_2011_Data_Release_Dec_2013_PPT%20(27.12.13).ppt.

Patel V. Poverty, inequality and mental health in developing countries. In: Leon D, Walt G, editors. Poverty, inequality and health. Oxford: Oxford University Press; 2001. p. 247-62

Priyanka Padmanathan, et al. "A rapid appraisal of access to and utilization of psychotropic medicines in Bihar, India, International Journal of Mental Health Systems (2014), 8:29 http://www.ijmhs.com/content/8/1/29.

Rathod, Shanaya, et al. "Mental Health Service Provision in Low-and Middle-Income Countries". Rathod S, Pinninti N, Irfan M, et al. Mental Health Service Provision in Low- and Middle-Income Countries. Health Serv Insights. (2017). Published online 2017 Mar 28. doi:10.1177/1178632917694350.

Report on Medical Certification of Cause of Death, (2013). Office of the Registrar General, India, Ministry of Home Affairs,Vital Statistics Division, R. K. Puram, New Delhi.

Rutter M. Causal concepts and their testing. In: Rutter M., Smith D.J., editors. Psychosocial disorders in young people: Time trends and their causes. John Wiley; Chichester: 1995.

Sachin Shinde, Divya Rajaraman, Jaya, Gracy Andrew (2015), 'The Prayatana programme' in Divya Rajaraman, Sachin Shinde, Vikram Patel, School Health Promotion: Case Studies from India, New Delhi: Byword Books Private Limited, 105-131.

Santhya, K. G., R. Acharya, N. Pandey et al. 2017. Understanding the lives of adolescents and young adults (UDAYA) in Bihar, India. New Delhi: Population Council.

Stanford India Health Policy Initiative Institute of Socio-Economic Research on Development and Democracy (ISERDD). "Informal Providers: Understanding Motivations and Behaviours". https://indiahealthpolicy.stanford.edu/sites/default/files/informal_provider_report.pdf.

The development and pilot testing of a multicomponent health promotion intervention (SEHER) for secondary schools in Bihar, India. Glob Health Action. 2017; 10(1): 1385284.Published online 2017 Nov 8. doi:10.1080/16549716.2017.1385284.

Sachin Shinde, DIvya Rajaram, Vikram Patel (2015). School Health Promotion: Case studies from India. New Delhi: Byword Books Private Limited. ISBN 978-81-8193-123-8 (print version); ISBN 978-81-8193-090-3 (e-book version).

Stein, Dan J et al. "Integrating mental health with other non-communicable diseases." BMJ (Clinical research ed.) vol. 364 l295. 28 Jan. 2019, doi:10.1136/bmj.l295

Sundar M. Suicide in farmers in India. British Journal of Psychiatry 1999;175:585-6

The Mental Healthcare Act, 2017 No. 10 Of 2017 received the assent of the President of India on the April 7th, 2017.

The Rights of Persons with Disabilities Act, 2016 No.49 of 2016 received the assent of the President of India on the December 27th, 2016.

The National Trust Act, 1999, No.44 of 1999 received the assent of the President of India on December 30th, 1999.

The Juvenile Justice (Care and Protection of Children) Act, 2015 (Act No.2 of 2016) received the assent of the President on the 31stDecember 2015.

The Juvenile Justice (Care and Protection of Children)Rules, 2017 as enacted under section 110 of the Juvenile Justice (Care and Protection of Children) Act, 2015 (Act No.2 of 2016).

The Immoral Traffic (Prevention)Act of 1956 as amended by The Immoral Traffic (Prevention) Amendment Act of 2006.

The Protection of Women from Domestic Violence Act of 2005.

United Nations. Every Woman Every Child. (2015). "The Global Strategy for Women's, Children's and Adolescents' Health 2016-30". https://www.who.int/life-course/partners/global-strategy/globalstrategyreport2016-2030-lowres.pdf

Whiteford, Harvey A et al. "The global burden of mental, neurological and substance use disorders: an analysis from the Global Burden of Disease Study 2010" PloS one vol. 10,2 e0116820. (Feb, 6th 2015) doi:10.1371/journal.pone.0116820

Weinstein, Ali A, et al. "Depression in Patients with Nonalcoholic Fatty Liver Disease and Chronic Viral Hepatitis B and C". Psychosomatics ?Volume 52, Issue 2, March–April 2011, Pages 127-132. https://doi.org/10.1016/j.psym.2010.12.019

World Health Organization. (2005). WHO-AIMS Version 2.2, World Health Organization Assessment Instrument for Mental Health Systems. Geneva, Switzerland.

World Health Organization and Calouste Gulbenkian Foundation. 'Social determinants of mental health'. Geneva, World Health Organization, 2014.

World Health Organization, Secretariat for the Development of a Comprehensive Mental Health Action Plan. (August 27th, 2012). "Risks to mental health: an overview of vulnerabilities and risk factors". https://www.who.int/mental_health/mhgap/risks_to_mental_health_EN_27_08_12.pdf.

World Health Organization. Fact sheet on Adolescent Mental Health. (September 18th, 2018). https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health.

World Health Organization. Fact sheet on Mental disorders. (April 9th, 2018). https://www.who.int/news-room/fact-sheets/detail/mental-disorders.

WHO Mental Health Action Plan (2013-2020), Geneva, Switzerland. ISBN 978 92 4 150602 1

Notes

Notes