

Original Research Article

Healthier mind builds healthier nation under ABArK

Gagana G. D.^{1*}, Suresh G. Shastri¹, Srinivas P. K.¹, Pooja S.¹, Murugesh J.¹,
Rajani Parthasarathy², Azad Devyani³, Himani Rathore³, Shivashankara N.⁴, Randeep D.⁵

¹Department of Health and Family Welfare, AB-ArK Cell, Commissionerate of Health and Family Welfare Services, Bengaluru, Karnataka, India

²Mental Health, Department of Health and Family Welfare, Bengaluru, Karnataka, India

³Department of Epidemiology, NIMHANS, Bengaluru, Karnataka, India

⁴Department of Health and Family Welfare, Suvarna Arogya Suraksha Trust, Bengaluru, Karnataka, India

⁵Department of Health and Family Welfare, Karnataka, India

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*Correspondence:

Dr. Gagana G. D.,

E-mail: gaganadaniga@gmail.com

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ABSTRACT

Background: The State of Karnataka launched a scheme called “Arogya Karnataka” as a part of universal health coverage following the Karnataka Integrated Public Health Policy 2017 and Karnataka Vision 2025 document. With the goal of achieving universal health coverage (UHC), Karnataka, a national leader in healthcare, launched the Arogya Karnataka scheme in March 2018. It was later integrated with the government of India's national health protection scheme Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) to help with financial protection. Mental health, as defined by the World Health Organization (WHO), refers to “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”.

Methods: A cross-sectional analysis of data collected from the State Health Agency, Suvarna Arogya Suraksha Trust (SAST) portal. The study was conducted for a period 12 months from January to December 2022.

Results: The study included 7292 mental disorder patients, majority of were male (70.95%), having age group of 31-45 years (45.41%), and belonged to the Below poverty line (BPL) (94.54%). Majority of cases were psychoactive substance use (64%) followed by Schizophrenia (22%) and Mental Retardation (14%).

Conclusions: Ayushman Bharat –PM-JAY Arogya Karnataka (AB-PMJAY ArK) has potential to reduce the out of pocket expenditure, distress financing and reduce catastrophic health expenditure which will lead to significant impact on health indices.

Keywords: Ayushman Bharat-PM-JAY-ArK, Mental health, Karnataka's model, Schizophrenia, Catastrophic cost

INTRODUCTION

The State of Karnataka launched a scheme called “Arogya Karnataka” as a part of universal health coverage following the Karnataka Integrated Public Health Policy 2017 and Karnataka Vision 2025 document. With the goal of achieving universal health coverage (UHC), Karnataka, a national leader in

healthcare, launched the Arogya Karnataka scheme in March 2018. It was later integrated with the government of India's national health protection scheme Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) to help with financial protection. Mental health, as defined by the World Health Organization (WHO), refers to “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to

make a contribution to his or her community". Under this integrated scheme, beneficiaries can avail themselves of the specified 1650 treatment procedures in both the Government Hospitals and Empanelled Private Hospitals across India with appropriate referral.¹ Ayushman Bharat scheme ensures timely treatment, patient satisfaction, improved productivity, improvements in health outcomes and efficiency, job creation. Thus, leading to an improvement in the quality of life.²

Mental health, as defined by the World Health Organization (WHO), refers to "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community".³ There are various Individual biological and psychological factors that can increase a person's susceptibility to mental health problems such as social support, social integration emotional and behavioural skills, prenatal damage, brain defects or injuries, substance abuse and genetics. Additional, exposure to adverse social, economic, environmental events such as poverty, inequality, violence and environmental deprivation can also increase the likelihood of experiencing mental disorders. In India mental disorders poses a significant public health challenges in terms of prevalence, burden of disease and disability. Conditions such as behavioral disorders due to psychoactive substance use, mood disorders and schizophrenia are the single largest cause of disability and impose a substantial economic burden.

Mental ill-health is a leading cause of disease burden globally. Overall, 14% of the global burden of disease is attributable to neuropsychiatric disorders. Such higher burden is mainly due to the chronic disabling nature of common mental disorders like Behavioral disorder due to

psychoactive substance use, Schizophrenia, Mental Retardation and Psychosis⁴. The Census of India 2011 revealed that the proportion of disabled individual in relation to the total population is 2.21% in Residential areas, 2.24% in rural areas and 2.17% in urban areas⁵. This finding has drawn attention to the significance of mental disorders in public health. The burden of mental disorders is likely to have been overlooked due to lack of appreciation of their connectedness with other health conditions. Mental disorders can increase the risk of both communicable and non-communicable diseases, as well as contribute to unintentional and intentional injuries. Similarly, various health conditions increase the risk for mental disorder, and the presence of comorbidity complicates the process of help-seeking, diagnosis, treatment which ultimately influences prognosis. There are significant disparities in the provision of health services for individual with mental disorders, and there is a room for improvement in the quality of care for both mental and physical health conditions for these individuals.

METHODS

A cross-sectional analysis of data collected from the State Health Agency, Suvarna Arogya Suraksha Trust (SAST) portal. The study was conducted for a period 12 months from January to December 2022. Mental disorder related treatment packages were recognised from the 1650 treatment packages listed on SAST portal. 17 packages related to mental disorder were included (Table 1). Data collection involved extracting relevant information from the SAST portal regarding patients who availed the identified mental disorder-related treatment packages. Descriptive statistics were used to summarize characteristics of patients. The results were presented in terms of tables and graphs.

Table 1: List of mental disorder treatment packages.

Procedure code	Procedure name	Rates (INR)
2A.M8.00001	Organic, including symptomatic, mental disorders (routine ward)	750
2A.M8.00002	Mental and Behavioural disorders due to psychoactive substance use (routine ward)	750
2A.M8.00003	Schizophrenia, schizotypal and delusional disorders (routine ward)	750
2A.M8.00004	Mood (affective) disorders (routine ward)	750
2A.M8.00009	Mental and Behavioural disorders due to psychoactive substance use (HDU)	1250
2A.M8.00010	Schizophrenia, schizotypal and delusional disorders (HDU)	1250
2A.M8.00012	Neurotic, stress-related and somatoform disorders (HDU)	1250
2A.M8.00013	Behavioural syndromes associated with physiological disturbances and physical factors (HDU)	1250
2A.M8.00014	Mental Retardation (HDU)	1250
2B.M8.00005	Neurotic, stress-related and somatoform disorders (routine ward)	1500
2B.M8.00006	Behavioural syndromes associated with physiological disturbances and physical factors (routine ward)	1500
2B.M8.00007	Mental retardation (routine ward)	1500
2B.M8.00008	Organic, including symptomatic, mental disorders (HDU)	2500
2B.M8.00011	Mood (affective) disorders (HDU)	2500
2B.M8.00015	Pre- Electro Convulsive Therapy (ECT) and Pre- Transcranial Magnetic Stimulation (TMS)	1000

Continued.

Procedure code	Procedure name	Rates (INR)
	Package (cognitive tests, complete haemogram, liver function test, renal function test, serum electrolytes, Electro Cardiogram (ECG), CT/MRI brain, electroencephalogram, thyroid function test, VDRL, HIV Test, vitamin B12 levels, folate levels, lipid profile, homocysteine levels)	
2B.M8.00016	Electro Convulsive Therapy (ECT) - per session	3000
2B.M8.00017	Transcranial Magnetic Stimulation (TMS) - per session	1000

Inclusion criteria

Patients under 17 mental health packages were included in the study.

Exclusion criteria

Patients who didn't use 17 mental health packages were excluded in the study.

Sample size

Out of 17,91,061 Preauth data we have taken 7292 who comes our inclusion criteria.

RESULTS

Socio-demographic characteristics

The study included 7292 mental disorder patients, majority of them were male (70.95%), in age group of 31-45 years (45.41%), and belonged to the below poverty line (BPL) (94.54%) (Table 2).

Table 2: Socio-demographic profile of patients with mental disorders (N=7,292).

Categories	Frequency	Percentage
Gender		
Female	2118	29.04
Male	5174	70.95
Age (in completed years)		
<18	577	7.91
19-30	1704	23.36
31-45	3312	45.41
46-60	1305	17.89
>61	394	5.40
Family type		
Above Poverty Line (APL)	398	5.45
Below Poverty Line (BPL)	6894	94.54

Among the major mental disorders, majority of cases were of mental and behavioural disorder due to psychoactive substance use (64%) followed by schizophrenia (22%) and mental retardation (14%) (Figure 1).

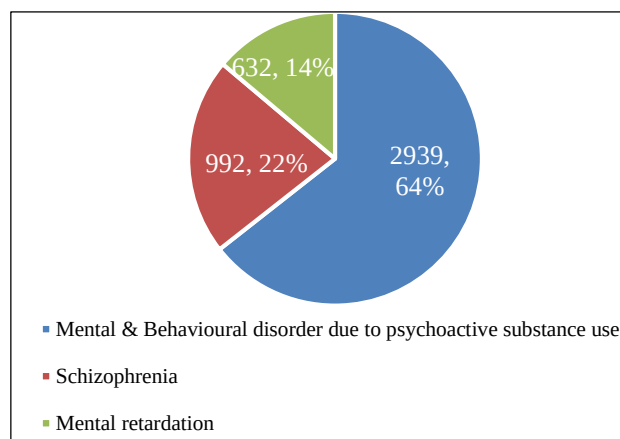


Figure 1: Major mental disorders among patients (n=7,292).

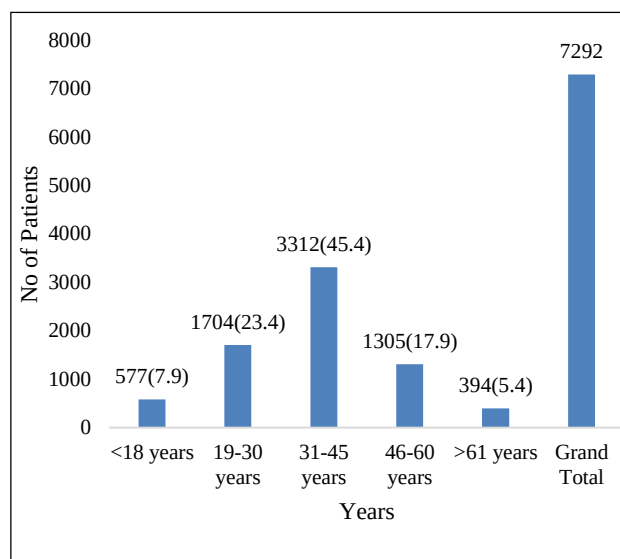


Figure 2: Age wise distribution of patients with mental disorders (n=7,292).

Among the 7292 patients, majority of the patient were from the age group 31-45 years (45.41%) (Figure 2).

Among all the patients, majority of patient (99.7%) received treatment from Government hospitals, while only 22 patients (0.3%) from private hospitals (Table 3).

Table 3: Sector wise utilization of mental disorders treatment packages.

Type of hospital	BPL		APL		Grand total	
	No. of patients (%)	Preauth amt. approved (INR) (%)	No. of patients	Preauth amt. approved (INR) (%)	Total no. of patients (%)	Total Preauth amt. approved (INR) (%)
Government	6872 (99.7)	142110600 (99.3)	398 (100.0)	2627131 (100.0)	7270 (99.7)	144737731 (99.3)
Private	22 (0.3)	944000 (0.7)	0 (0)	0 (0)	22 (0.3)	944000 (0.6)
Grand total	6894 (94.5)	14,30,54,600 (98.2)	398 (5.4)	26,27,131 (1.8)	7292	14,56,81,731

The utilization of mental disorder treatment packages varied across different types of healthcare facilities. Majority (39%) availed treatment from super specialty, followed by medical colleges (33%), district hospital (22.72%), taluk hospital (2.77%) and other hospitals (2.09%). A small proportion of 0.3% opted for private hospitals (Table 4).

Table 4: Type of facility wise utilization of mental disorders treatment packages.

Type of facility	No of patients (%)
District hospitals	1657 (22.72)
Medical colleges	2412 (33)
Super specialty hospitals	2846 (39)
Taluk hospitals	202 (2.77)
Other hospitals	153 (2.09)
Private hospitals	22 (0.3)
Grand total	7292

Table 5: Ward wise utilization of mental disorder treatment packages.

Type of ward	No. of patients (%)	Preauth amt. approved (INR) (%)
HDU	1,943 (26.64)	2,25,44,812 (2)
Routine ward	5,349 (77.35)	12,31,36,919 (98)
Grand total	7,292	14,56,81,731

Among all the patients, 77.35% patients were admitted for mental disorder treatment in the routine ward for these patients, the preauthorization amount approved for their treatment was 98%. While only 26.64% patients admitted at the high dependency unit (HDU), and preauthorization approved amount was 2% (Table 5).

DISCUSSION

Good health and well-being are one of the 17 Sustainable Development Goals, SDG goal 3 not only focusses on physical health, but mental health as well. The inclusion of mental health in SDG reflects the increased acknowledgment of the role of mental health.

In our study it shows that males have sought mental health care more compared to females.

It is estimated that four out of five people with mental illness in low and Middle-Income Countries (LMIC) receive no effective treatment and mental health is often one of the lowest health priorities in those settings compare to a study done by Rathod et al.¹² Health services insights, shows same findings that is despite these promising activities and the publication of high-profile reports in several countries, progress in mental health service development has been slow in most LMICs. Scaling up mental health services in LMICs requires flexible policies, adequate resources, effective interprofessional communication, and evidence-based training, supplemented with an evaluation plan to measure successes against specific benchmark criteria.

Our study shows greater access in Karnataka to quality of mental disorder treatment facilities as mental health personnel are available in government hospitals.

The most common type of hospital admission was for mental and behavioural disorders due to psychoactive substance use at routine ward which accounted for 67.13%, schizophrenia were 23.43%, mental retardation were 9.43% and at high dependency units (HDU) for mental and behavioural disorders due to psychoactive substance use accounted for 57.86%, schizophrenia were 17.67% , for mental retardation were 24.45% same as the study done by Naser et al shows hospital admission rates were higher among males, the middle-aged, and elderly populations same as our study.¹³

CONCLUSION

Ayushman Bharat-PM-JAY Arogya Karnataka (AB-PMJAY ArK) has potential to reduce the out of pocket expenditure, distress financing and reduce catastrophic health expenditure which will lead to significant impact on health indices. Addressing disorders such as substance abuse (alcohol, tobacco, drugs) and complex mental disorders (schizophrenia, depression, anxiety), through health promotion and specific protection measures can have a major impact on early diagnosis and treatment.

Integrating the AB-PMJ Ark scheme with the National Mental Health Programme (NMHP) has the potential to significantly improve the treatment, rehabilitation, prevention and promotion of mental wellbeing. The specific objective of treating psychotic disorder is to achieve remission, reduce the frequency, severity and consequences of episode while maximizing the individual's social and psychological functioning. These disorders can hinder the progress towards achieving various millennium development goals, including gender equality and women empowerment, reducing child mortality, improving maternal health. To raise awareness about mental health and combat stigma it is essential to integrate mental health into all the aspects of health and social policy, through various means such as media campaigns, educational workshops in school, colleges and companies. Initiatives that involves individual with lived experience of mental disorder and psycho-social disability can ensure better quality of mental healthcare for the community. Active participation from all stakeholders is vital in promoting mental health awareness and combating stigma.

This study has few limitations. Lack of patient follow up. Due to secondary data we couldn't analyse any other associate factors.

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