

DESCRIPTIVE STUDY OF SOCIO DEMOGRAPHIC AND CLINICAL PROFILE OF REMAND PRISONERS IN THE FORENSIC PSYCHIATRY UNIT OF A TERTIARY CARE HOSPITAL

S. Bevin¹, V. Karthikeyan¹, MSP. Saravanan¹, N. Prabhu¹, A. Karthikeyan²

¹Assistant Professor, Institute of Mental Health, Madras Medical College, Chennai, Tamil Nadu, India.

²Junior Resident, Institute of Mental Health, Madras Medical College, Chennai, Tamil Nadu, India.

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Corresponding Author:

Dr. N. Prabhu,
Email: drmyprabhu@gmail.com

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Abstract

Background: The relationship between mental health and criminal behavior is complex and multifaceted. This study aims to explore the socio-demographic, clinical, and criminological profiles of remand prisoners within a tertiary care hospital's forensic psychiatry unit. **Material & Methods:** A retrospective chart review was conducted, encompassing a 10-month period from January 2021 to October 2021. Data were collected from case records of remand prisoners admitted to the Institute of Mental Health, Chennai. Sociodemographic characteristics, clinical diagnoses, crime patterns, and weapon use were analyzed using descriptive statistics. **Results:** The study revealed that the majority of participants were young adults aged 21-30, with males comprising 96.1% of the cohort. Schizophrenia was the most prevalent diagnosis among study participants (51%), followed by substance abuse (11.7%). Homicidal crimes accounted for 47.1% of offenses, with sharp weapons being the most commonly used. A statistically significant association was found between the occurrence of homicidal crimes and the type of weapon used ($p < 0.003^*$). **Conclusion:** This study highlights the high prevalence of severe mental illness among remand prisoners and underscores the need for early detection and intervention. Addressing underlying mental health needs, promoting family support, and enhancing mental health services are crucial for reducing recidivism and fostering rehabilitation.

INTRODUCTION

The intricate and multifaceted relationship between mental health and criminal behavior has been a subject of profound interest and scrutiny for several decades within the realms of psychiatry, psychology, and criminology. This intersection represents a complex interplay of individual vulnerabilities, societal factors, and systemic challenges, all of which converge to shape the experiences and outcomes of individuals who find themselves entangled with the law.

Psychiatric disorders, ranging from mood disorders to psychosis, have long been recognized as prevalent among individuals who come into conflict with the legal system.^[1] The presence of such disorders often complicates legal proceedings and may significantly influence the trajectory of criminal behavior. Indeed, the concept of criminality itself is deeply intertwined with societal perceptions of morality, legality, and individual responsibility,

making the study of mental health within the context of crime both inherently fascinating and socially significant.

Crime, defined broadly as any act or omission deemed punishable by law, encompasses a vast array of behaviors and actions, ranging from petty theft to violent offenses.^[1] At its core, criminal behavior represents a deviation from societal norms and legal statutes, reflecting a complex interplay of individual motivations, environmental influences, and psychological factors. Individuals who engage in criminal activities, commonly referred to as criminals, often exhibit a myriad of psychological vulnerabilities and psychiatric symptoms that warrant careful examination and consideration.^[2]

Psychiatric illness, in many cases, serves as a contributing factor to criminal behavior, amplifying impulsive tendencies, impairing judgment, and distorting perceptions of reality.^[3] The presence of delusions, hallucinations, and substance abuse further complicates the picture, rendering

individuals more susceptible to engaging in illegal activities and placing them at heightened risk of incarceration. Substance abuse, in particular, has been identified as a significant risk factor for criminality, with substance-dependent individuals frequently resorting to illegal means to support their addiction or alleviate withdrawal symptoms.^[4]

Moreover, individuals with antisocial personality traits and poor coping skills are disproportionately represented within the prison population, underscoring the complex interplay between psychological vulnerabilities and criminal behavior.^[4] The prison environment itself, characterized by its inherent stressors, social hierarchies, and restrictions on personal autonomy, can exacerbate preexisting mental health conditions and contribute to the deterioration of psychological well-being among inmates.^[5]

Research conducted by Singleton highlights the disproportionate representation of individuals with psychotic disorders within correctional facilities, with such individuals often enduring prolonged periods of incarceration due to challenges in accessing appropriate mental health care and support.^[5] This underscores the urgent need for improved mental health services within the criminal justice system, with a particular emphasis on early detection, intervention, and rehabilitation.

Of particular concern is the prevalence of severe psychiatric morbidity among young adults, typically within the age range of 20 to 40 years, who become embroiled in the criminal justice system. Studies have consistently shown that this demographic group exhibits higher rates of mental illness compared to the general population, with conditions such as depression, anxiety disorders, and substance abuse disorders being particularly prevalent.^[6]

Addressing the mental health needs of this vulnerable population represents a critical step towards mitigating the cycle of recidivism and promoting successful reintegration into society. Early detection and intervention strategies aimed at identifying individuals at risk of criminal behavior and addressing underlying mental health issues hold promise for reducing crime rates and improving outcomes for both individuals and communities alike.^[6]

Given the scarcity of literature on the specific intersection of mental health and criminal justice within the Indian context, the present study seeks to address this gap by conducting a comprehensive examination of the socio-demographic and clinical profiles of remand prisoners within the Institute of Mental Health, Chennai. By elucidating the unique challenges and needs of this population, this study aims to inform evidence-based interventions and policies aimed at improving outcomes and promoting the well-being of individuals involved in the criminal justice system.

MATERIALS AND METHODS

Study Setting: This retrospective chart review was conducted as a descriptive cross-sectional study within the Institute of Mental Health, Chennai. The study period spanned from January 2021 to October 2021.

Study Participants: The study included remand prisoners aged between 18 to 70 years who were admitted to the forensic psychiatry unit during the specified study period. Inclusion criteria encompassed individuals who were referred to the Institute for psychiatric evaluation and treatment. Exclusion criteria were limited to cases with insufficient data available in the medical records for comprehensive analysis.

Sample Size: The total number of patients receiving treatment at the Institute of Mental Health during the study period was 51. Approximately 50 to 60 remand prisoners are typically referred to the institute annually, indicating a relatively consistent caseload.

Sampling Technique: Convenience sampling was employed to select participants for inclusion in the study. This approach allowed for the inclusion of all eligible remand prisoners admitted to the forensic psychiatry unit during the study period, ensuring a representative sample of the target population.

Study Methodology: The methodology utilized for this study involved a retrospective chart review of medical records. Data collection focused on retrieving relevant information from the case records of all male and female prisoners referred to the Institute from January 2021 to October 2021, encompassing a period of 10 months. Sociodemographic data, clinical history, criminological background, and psychiatric diagnoses, as per the International Classification of Diseases, 10th Revision (ICD-10), were extracted and analyzed.

Study Tools: The primary tool utilized for data collection was the medical records of remand prisoners admitted to the forensic psychiatry unit during the specified study period. These records provided comprehensive documentation of patients' sociodemographic characteristics, medical history, legal status, and psychiatric diagnoses.

Ethical Issues: Ethical considerations were paramount throughout the conduct of this study. Approval for the retrospective chart review was obtained from the Institutional Ethics Committee of the Institute of Mental Health, Chennai. Patient confidentiality and privacy were rigorously maintained, with all data anonymized to protect individuals' identities. Informed consent was waived due to the retrospective nature of the study and the use of de-identified data.

Statistical Analysis: Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics were utilized to summarize the demographic and clinical

characteristics of the study population. Frequencies, percentages, means, and standard deviations were calculated as appropriate to describe the distribution of variables. Additionally, inferential statistics may be employed, if applicable, to explore relationships between variables and identify potential associations or correlations within the dataset.

RESULTS

The sociodemographic characteristics of the study population is given in Table 1. Among 51 prisoners, 49 were male, 2 were female. 33 percent of them had graduation and 31 percent of them got middle school education. 33.3 percent had occupation of unskilled and semiskilled followed by 29.4 percent were unemployed. When assessing the Socio-economic scale by modified kuppasamy scale 77.4 percent belongs to lower class followed by 22.6 were belongs to lower middle.

Table 1: Sociodemographic characteristics of the study participants

Sociodemographic characteristics	Number (N)	Percentage (%)
Age		
<20	1	2
21-30	23	45.1
31-40	18	35.3
41-50	6	11.8
51-60	2	3.9
61-70	1	2
Sex		
Male	49	96.1
Female	2	3.9
Education		
Illiterate	3	5.9
Primary	8	15.7
Middle	16	31.4
Secondary	7	13.7
Graduate	17	33.3
Occupation		
Unskilled worker	17	33.3
Semiskilled worker	17	33.3
Skilled	2	3.9
Unemployed	15	29.4
Marital status		
Unmarried	36	70.6
Married	10	19.6
Married but separated.	4	7.8
Divorced	1	2
Religion		
Hindu	44	86.3
Muslim	6	11.8
Christian	1	2
Family type		
Nuclear	44	86.3
Joint	6	11.8
No support	1	2
Residence		
Urban	19	37.3
Rural	32	62.7

Table 2 presents the distribution of comorbidities among the study participants. The most prevalent comorbidity observed among the study participants was seizure, with 5 individuals (39%) presenting with this condition. Hypertension was the second most common comorbidity, affecting 3 participants (23%). Diabetes, asthma, and ligament tear were each reported in a smaller proportion of participants, with 1 individual (8%), 2 individuals (15%), and 2 individuals (15%), respectively, presenting with these conditions.

Table No. 2: Distribution of comorbidities among the study participants

Comorbidity	Number (N)	Percentage (%)
Diabetes	1	8
Hypertension	3	23.
Seizure	5	39
Asthma	2	15
Ligament tear	2	15

Table 3 presents the clinical profile of the study participants. The most prevalent diagnosis among the study participants was schizophrenia, with 26 individuals (51%) receiving this diagnosis. Substance abuse was the second most common diagnosis, affecting 6 participants (11.7%), followed by psychosis, which was observed in 5 individuals (9.8%). Other psychiatric diagnoses reported among the study participants included substance use disorder with bipolar affective disorder (2 individuals, 3.8%), substance use disorder with antisocial personality disorder (1 individual, 2%), paranoid personality disorder (1 individual, 2%), depression (1 individual, 2%), mental retardation (MR) (1 individual, 2%), and intellectual disability (ID) with psychosis (1 individual, 2%).

Table 3: Clinical profile of the study participants

Diagnosis	Number (N)	Percentage (%)
Schizophrenia	26	51
Substance abuse	6	11.7
Psychosis	5	9.8
Substance with bpad	2	3.8
Substance with aspd	1	2
Paranoid personality	1	2
Depression	1	2
MR	1	2
Depression	1	2
ID with psychosis	1	2

Around 28 (54.9%) has previous history of psychiatric consultation while others not. Majority of the study participants who reported of having psychiatric illness have been taking the treatment for more than 5 years 21 (75%) followed by 2-5 years, 5 (17.9%). Among our study participants majority have done non homicidal crime 27 (52.9%) followed by the homicidal crime (47.1%).

Table 4 outlines the weapons utilized by the study participants in the commission of their offenses. The most commonly used weapon among the study participants was the knife, with 19 individuals (37%) reported to have used this instrument. Following closely were incidents involving the use of hands, reported by 14 participants (27%). Other weapons reported in the study included sticks and kattai (each reported by 5 participants, 10%), aruval (4 participants, 8%), and ulakkai, ammikal, tiles, and koduvaal (each reported by 1 participant, 2%). These findings highlight the diverse range of weapons employed in criminal acts among the study cohort.

Table 4: Weapon used by the study participants

Weapon	Number (N)	Percentage (%)
Stick	5	10
Ulakkai	1	2
Kattai	5	10
Knife	19	37
Hands	14	27
Aruval	4	8
Ammikal	1	2
Tiles	1	2
Koduvaal	1	2

The most common victims of the study participants were of non-family members 29 (56.9%) followed by family members. Table 5 illustrates the association between the type of weapon used and the occurrence of homicidal crimes among the study participants. Among cases where homicidal crimes were present, blunt weapons were implicated in 10 incidents, while sharp weapons were involved in 14 incidents. In contrast, in cases where homicidal crimes were absent, only 1 case involved the use of a blunt weapon, while 26 cases involved the use of sharp weapons. A statistical analysis revealed a significant association between the occurrence of homicidal crimes and the type of weapon used ($p = 0.003$), underscoring the importance of considering the specific characteristics of weapons in criminal investigations and forensic analyses.

Table No. 5: Association between crime and type of weapon used

Homicidal	Blunt weapon	Sharp weapon	P value
Present	10	14	0.003
Absent	1	26	
Total	11	40	

DISCUSSION

The present study offers valuable insights into the socio-demographic characteristics, clinical profiles, and criminological aspects of remand prisoners within the forensic psychiatry unit of a tertiary care hospital. The discussion will delve into the findings of the study, highlighting key observations, discrepancies with existing literature, limitations, and implications for clinical practice and policy development.

The majority of study participants belonged to the 21-30 age group, consistent with findings from previous studies done by Sabitha et al.^[6] This demographic trend underscores the vulnerability of young adults to engage in criminal behavior and emphasizes the need for targeted interventions during this critical developmental period. Additionally, the overwhelming representation of males in the study cohort highlights the gender disparity in criminal justice involvement, echoing findings from prior research.^[6]

Surprisingly, a high proportion of participants were unmarried, contradicting findings from Sethi et al. This discrepancy suggests the need for further exploration into the relationship between marital status and criminality, particularly among young, unmarried individuals. Similarly, discrepancies in educational attainment and occupational status compared to previous studies^[6-8] warrant attention and may reflect underlying socio-economic disparities that influence criminal behavior.

Schizophrenia emerged as the most prevalent psychiatric diagnosis among study participants, consistent with previous research.^[6, 7, 9] This finding underscores the significant burden of severe mental illness within the criminal justice system and highlights the critical importance of early detection and intervention in addressing mental health needs among incarcerated individuals.

The distribution of crime types revealed a notable proportion of homicidal offenses, contrary to findings by Somasundaram et al.^[10] This discrepancy underscores the variability in criminal behavior across different populations and underscores the need for tailored interventions to address the diverse needs of remand prisoners.

Regarding victim details, the predominance of non-family members as victims aligns with previous research, suggesting that individuals may be more likely to commit crimes against acquaintances or strangers rather than family members. This finding underscores the complexity of interpersonal relationships and the diverse motivations underlying criminal behavior.

The utilization of weapons in criminal acts revealed a significant association between the type of weapon used and the occurrence of homicidal crimes. This finding underscores the importance of forensic analysis in criminal investigations and highlights the need for targeted interventions to reduce the

availability and use of lethal weapons in criminal activities.

Several limitations must be acknowledged when interpreting the findings of this study. Firstly, the reliance on retrospective chart review introduces the possibility of information bias and limits the depth of data available for analysis. Secondly, the study was conducted within a tertiary care hospital setting, which may limit the generalizability of findings to other populations or settings. Additionally, the small sample size restricts the statistical power of the study and may limit the generalizability of findings to the broader population of remand prisoners.

Despite these limitations, the present study offers valuable insights into the socio-demographic, clinical, and criminological characteristics of remand prisoners within a forensic psychiatry unit. The findings highlight the complex interplay between mental health, socio-demographic factors, and criminal behavior and underscore the need for holistic approaches to addressing the needs of individuals involved in the criminal justice system.

Moving forward, targeted interventions aimed at addressing underlying mental health needs, promoting early detection and intervention, and addressing socio-economic disparities are essential for reducing recidivism and promoting successful reintegration into society. Additionally, efforts to strengthen family support systems and enhance mental health services at the primary care level are critical for preventing involvement in criminal activities and promoting overall well-being. This study contributes to our understanding of the factors influencing criminal behavior among remand prisoners and provides valuable insights for informing clinical practice, policy development, and future research endeavors in the field of forensic psychiatry and criminology.

CONCLUSION

This study highlights the prevalence of severe mental illness, particularly schizophrenia, among incarcerated individuals, emphasizing the need for early detection and intervention. Addressing underlying mental health needs, promoting family support, and strengthening mental health services at the primary care level are crucial for reducing recidivism and fostering rehabilitation. This study contributes to the understanding of factors influencing criminal behavior and informs clinical practice and policy development in forensic psychiatry and criminology.

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