Research Report

PSYCHIATRIC MORBIDITY AMONG PRISONERS IN SOUTH INDIA: A CROSS-SECTIONAL STUDY

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ABSTRACT

Introduction: Everyone has a fundamental right to enjoy the best possible level of physical and mental health, irrespective of race or gender. The incarcerated are taken away from their friends and relatives, regardless of their mental state. There is a high prevalence of mental illness among male and female prisoners, as per various studies. The aim of the study is to assess the prevalence of psychiatric morbidity among prisoners without a past history of psychiatric illnesses, to determine the association of socio-demographic factors, and to assess the prevalence of various psychiatric disorders in this population. **Methods:** A cross-sectional study was conducted on 200 male prisoners by simple random sampling. The assessment was done using a self-prepared socio-demographic proforma and Mini International Neuropsychiatric Interview. **Result:** The prevalence of any psychiatric morbidity was observed to be 86%, and the most commonly seen morbidity was substance use disorder (81%), followed by adjustment disorders (20%), and 96% had a low risk for suicide. There was almost equal representation of age groups: 74% of prisoners were married or widowed, 90% belonged to rural residences, 75% of the participants had secondary education or below, almost 95% were below poverty line, and 92% were employed previously. **Conclusion**: In our study, we found that the most common reason for imprisonment was murder and other causes like abkari, family law related, as well as political issues. Almost 12% and 18% reported crime in the family and crime by peers. The most commonly seen morbidity was substance use disorder (81%), followed by adjustment disorders (20%). Around 96% had a low risk for suicide.

KEYWORDS: Mental health, prisoners, psychiatric morbidity

INTRODUCTION

According to the World Health Organization (WHO), every human being has a fundamental right to enjoy the best possible level of physical and mental health, regardless of race or gender.[1] Convicted people are put behind bars regardless of their mental state.[2] Mental illnesses are very common among convicts. Many persons commit crimes due to their underlying psychiatric illness and get incarcerated.[3,4]

Prisoners held in cells are detached from their dear and near ones for extended periods. According to research, India's jails can house a maximum of 4.04 lakh people, but the actual number of inmates residing there is 4.79 lakhs.[5] The necessity for specialized mental healthcare among prisoners has been acknowledged. According to studies, there is a high prevalence of mental illness and

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substance use among convicts.[6]

Psychiatric disorders can emerge either before or during incarceration and are frequently found in prisoners.[7] Researchers have long been interested in the psychology of criminal behavior, which has been described in terms of social disarray, cultural tensions, and psychological determinants. Though psychiatric illnesses appear to be prevalent in this population, systematic information on the frequency and types of mental diseases among inmates is lacking.[8]

Prisoners' mental health issues are frequently disregarded. As per earlier studies, there is a significant prevalence of psychiatric disorders among both male and female convicts .[9] There was a high prevalence of suicide attempts and substance use problems among the detainees. Conflict with the criminal justice system is more likely for people with antisocial personality disorders.[10] Confinement will not only worsen the underlying psychiatric disorders but also will cause mental abnormality in people who are already at risk. There will be variations in rates of psychiatric morbidity depending upon the amount of stress that the incarcerated has to experience.[11]

Policy recommendations by Fazel et al. (2012) and WHO suggest adherence to basic principles of human and prison rights and equivalence of health care services in prison to those available in the community.[12] They also recommend equity of funding for mental and physical health care services along with public health care to manage the prison health system.[13] Most of the studies on the psychiatric morbidity of convicts are from Western countries.[2,14]

Despite WHO's suggestions of good basic prison care, meeting their needs, and screening their mental health once behind bars, psychiatric morbidity continues. The majority of Indian prisons are overcrowded, and 20% of all convicts are reportedly suffering from mental illness.[15] According to research by Ayirolimeethal et al. (2014), 68.6% of convicts have a mental illness. Prisoners' mental health issues require more exploration. Amplifying research is needed for the same.[2,16]

There is a dearth of major studies conducted among prisoners. Existent research is mainly focused on Western settings. This study focuses on male prisoners and further explores the mental health issues among them.

The aim of the study was to estimate the prevalence of psychiatric morbidity among prisoners without a past history of psychiatric illness and to determine the association of psychiatric morbidity with sociodemographic factors and the prevalence of various psychiatric disorders in this population.

MATERIALS AND METHODS

A cross-sectional study among prisoners, which included both convicted and undertrials admitted to a prison in South India, was conducted between May 2021 and April 2022. After obtaining the approval of the Institutional Ethics Committee (IEC No. 125/2019/GMCK) and getting the necessary permission from the prison in charge, the study was started. Subsequently, 200 prisoners were recruited for the study after obtaining written informed consent. The prison in which the study was conducted accommodated only male prisoners. Those aged 18 to 60 years were included; uncooperative prisoners and prisoners on treatment for mental illness were excluded.

Prisoners who consented were enrolled using simple random sampling. The sample size was calculated by taking the prevalence of psychiatric illness among prisoners as 68.6%, as given in a study by Ayirolimeethal et al. (2014). Taking α as 5% and relative precision as 10% of the prevalence, the sample size was rounded off to 200. After getting the informed consent, all cases satisfying the inclusion and exclusion criteria were assessed with a self-prepared socio-demographic proforma and

Table1. Clinical and sociodemographic characteristics of participants

Variables		Frequency (%) (N = 200)
Age group (in years)	21 – 40	100 (50.0)
	>41	100 (50.0)
Marital status	Unmarried	51 (25.5)
	Married/ Widowed	148 (74.0)
	Divorced	1 (0.5)
Residence	Rural	179 (89.5)
	Urban	21 (10.5)
Religion	Christian	14 (7.0)
	Hindu	101 (50.5)
	Muslim	85 (42.5)
Education	Illiterate	20 (10.0)
	Primary	62 (31.0)
	Secondary	47 (23.5)
	Intermediate	56 (28.0)
	Graduate or >	15 (7.5)
SES	APL	11 (5.5)
	BPL	189 (94.5)
Previous employment	Employed	184 (92.0)
	Unemployed	16 (8.0)
Type of offences	Drug	16 (8.0)
	Murder	65 (32.5)
	Against properties	1 (0.5)
	Financial	2 (1.0)
	Immoral trafficking	10 (5.0)
	Others	118 (59.0)
Crime in family	Yes	25 (12.5)
	No	175 (87.5)
Crime by peers	Yes	36 (18.0)
	No	164 (82.0)
Convict/ Remand	Remand	71 (35.5)
	Convict	129 (65.5)
Previous imprisonment	Yes	49 (24.5)
	No	151 (75.5)
Suicidal risk	Low	192 (96.0)
	Moderate	6 (3.0)
	Severe	2 (1.0)

APL – Above poverty line, BPL – Below poverty line, SES – Socio-economic status

Mini International Neuropsychiatric Interview (MINI).[17] Assessment of suicidality was done by psychiatric assessment as well as by using MINI.

The data collected were entered in MS Excel and analyzed using SPSS Version 24 Software. Psychiatric disorders in prisoners were expressed as frequency and percentage. Socio-demographic variables were expressed as frequency and percentage. The socio-demographic characteristics were compared between those with and without psychiatric morbidity. The association between psychiatric morbidity and socio-demographic characteristics was assessed using the chi-square test/Fisher's exact test as appropriate. The probability value 'p' <0.05 was considered statistically significant.

RESULTS

There was an equal representation of the age groups. Among the participants, 74% were married/widowed, around 90% belonged to rural settings, and almost 50% were Hindu by religion. About 64% of the participants were educated to secondary school or below, while nearly 95% belonged below the poverty line, and 92% were employed previously. The most common reason for which prisoners were jailed was murder and other causes like abkari, family law related, as well as political issues. Crime in the family and crime by peers were reported by 12.5% and 18%, respectively.

The prevalence of any psychiatric morbidity was observed to be 86%. The most commonly seen morbidity was substance use disorder (81%), followed by adjustment disorders (20%). Convicts constituted 65.5% of the sample, and 24.5% had a previous history of imprisonment. A low risk for suicide was observed in 96% of the sample, while 4% had moderate to severe risk. None of the socio-demographic variables were significantly associated with psychiatric morbidity among the prisoners.

DISCUSSION

In this study conducted with 200 prisoners, almost three-fourths of the sample were married/widowed, and around 90% belonged

Table 2. Association between socio-demographic characteristics and psychiatric morbidity of the study participants

Variables		Psychiatric morbidity		χ^2 (*df*)/ FE test†	P value
		Yes (n1 = 176) Frequency (%)	No (n2 = 24) Frequency (%)		
Age group	21-40years	90 (90.0)	10 (10.0)	0.75 (*1*)	0.38
	>41years	86 (86.0)	14 (14.0)		
Marital status	Unmarried	42 (82.3)	9 (17.7)	2.16 (*1*)	0.15
	Others	134 (89.8)	15 (10.1)		
†Residence	Rural	158 (89.9)	21(11.7)		0.75
	Urban	18 (85.7)	3 (14.3)		
†Religion	Christian	12 (85.7)	2 (14.3)		0.96
	Hindu	89 (88.1)	12 (11.9)		
	Muslim	75 (88.2)	10 (11.8)		
†Education	Illiterate	16 (80.0)	4 (20.0)		0.58
	Primary	53 (85.3)	9 (14.7)		
	Secondary	43 (91.4)	4 (8.6)		
	Intermediate	51 (91.1)	9 (8.9)		
	Graduate or above	13 (86.6)	2 (13.4)		
†SES	APL	9 (81.8)	2 (18.2)		0.08
	BPL	167 (88.3)	22 (11.7)		
†Employment	Employed	163 (87.6)	23 (12.4)		0.47
	Unemployed	13 (92.8)	1 (7.2)		

APL – Above poverty line, BPL – Below poverty line, *df* – degree of freedom, SES – Socio-economic strata

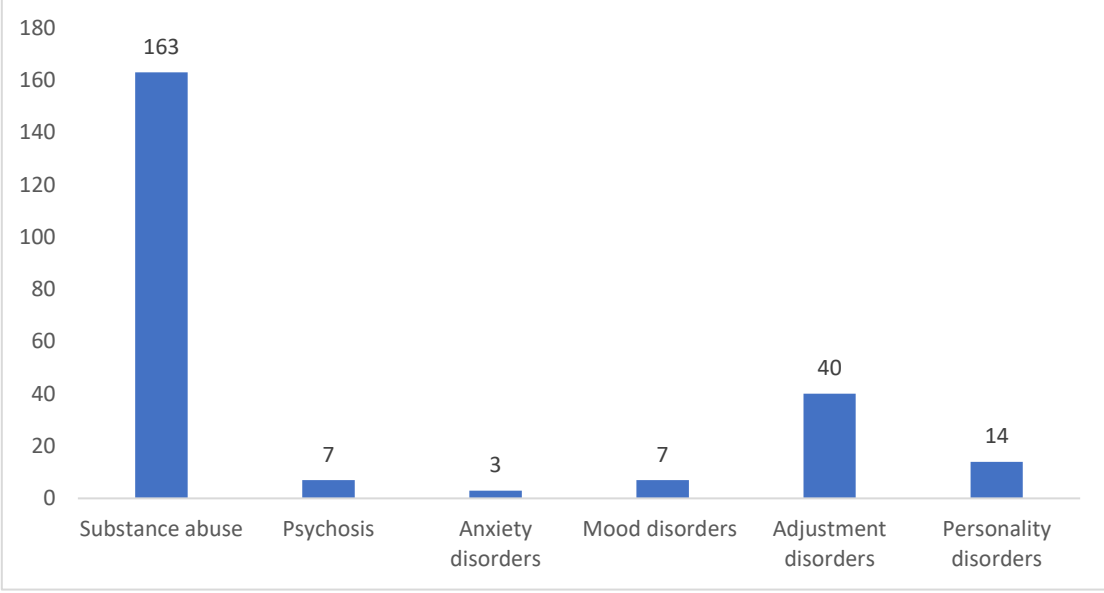
to rural residences. These results were found to be in line with other studies reported from varied study settings by Stedman et al. (1987), Birmingham et al. (1996), and Humber et al. (2004).[18,19,20] We also observed that around 64% of the participants were educated up to secondary school or below, almost 95% belonged to below poverty line socioeconomic status, and 92% were previously employed. These findings were comparable to other studies, which have found that the rate of imprisonment was more common among individuals with a low level of education and belonging to a lower socioeconomic status.[21,22]

Among both remanded and convicted prisoners, we observed that the most common reason for which they were jailed was murder (32%) and other causes like abkari/family law-related as well as political issues. Around 12% and 18% reported crime in the family and crime by peers. These findings were also comparable to other studies done by Kancharla et al. (2020) and Humber et al. (2004), who have reported that the common reasons for which the prisoners were jailed were murder and other reasons like political issues, abkari, etc.[20,23]

In our study, the prevalence of any psychiatric morbidity was observed to be 86%. This was found to be in line with the findings done by Kumar et al. (2019). However, our findings were found to be different from studies done by Aishatu et al. (2013).[21, 25] This could be due to the differences in the study population concerning age, nature of the crime, history or family history of crime, and other socio-demographic variables.

Regarding the distribution of various psychiatric morbidities, we observed that the most common morbidity was substance use disorders (81%), followed by adjustment disorders (20%). These were also comparable

Figure 1. Morbidity among study participants



to the findings observed in studies done by Thirumani et al. 2020.[26] Around 65% of the participants were convicts, and almost 25% had previous imprisonment history. About 96% had a low risk for suicide.

Concerning the secondary objective of determinants of psychiatric morbidity, we observed no significant association between the study variables and the outcome. These findings were also comparable to those reported by studies done in India by Kumar et al. (2014) and Ayirolimeethal et al. (2014).

WHO has given guidance regarding good basic health care in prison, including intensive and integrated services, meeting their social needs, screening them once behind bars, and continuing the treatment that he was on before incarceration. They have also directed social recovery to overcome social deficits and recommended appointing fellow prisoners or ex-offenders to support mental well-being.[13]

Conclusion

To conclude, in our study, we found that the most common reason for which prisoners were jailed was murder and other causes like abkari family law and political issues. Around 12% and 18% reported crime in the family and crime by peers. The prevalence of any psychiatric morbidity was observed to be 86%, and the most commonly seen morbidity was substance use disorder (81%), followed by adjustment disorders (20%). Around 96% had a low risk for suicide.

Future Directions

The dearth of treatment research has to be addressed by the collaboration of government, funding agencies, and researchers. WHO suggestions include mental health awareness to reduce stigma, evidence-based pharmacological and physiological treatment, monitoring of substance dependence and detoxifying measures, and assessing suicide risk by proper screening. They have also recommended the notion of mental health recovery by peer mentors who can provide credible support to other prisoners. These are a few efforts to increase access to quality mental health care and effective treatments that have to be implemented so that the incarcerated can be reframed into better citizens. Continuing existing reformation measures and beginning new steps are the immediate needs.

Limitations

This study, conducted only on male prisoners, to evaluate the effect of all independent

variables on the outcome variable, and the findings are generalizable only to similar study settings as it is from a single center in South India. This study has not taken the duration of stay in prison into account.

Despite these limitations, our study is one of the few studies that have evaluated the prevalence of psychiatric morbidity among prisoners in South India. Though several works of literature are available, this adds to existing studies that have assessed the determinants of psychiatric morbidity among prisoners. This study has focused on the high-risk population, that is, prisoners, who are at an increased risk of developing psychiatric illness.

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