Psychiatric morbidity in violent and nonviolent offenders: A cross-sectional comparative study

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Abstract

Background: Several studies have found that mental illnesses are very commonly seen in the prison population when compared to the normal population and they are a major public health concern. In most of the cases, it is very difficult to differentiate between abnormal personality and criminal behavior and their influence on psychopathology. In the literature, there were many studies done on the entire prison population. However, there were very few studies that compared the characteristics and psychopathology of both violent and nonviolent offenders which are distinct in many ways. Hence, the current study focussed on how the violent differ from the non-violent offenders.

Aim: This study aims to study the various sociodemographic factors, crime characteristics, and psychiatric morbidity in violent offenders and nonviolent offenders.

Study Design: It is a cross-sectional comparative study conducted at central prison Cherlapalli, Hyderabad.

Materials and Methods: Study sample includes 61 violent offenders involved in serious crimes like murder (IPC SEC 302), attempt to murder (IPC SEC 307) and 34 nonviolent offenders (involved in other crimes like theft, check bounce, etc.) The characteristics are analyzed using semi-structured intake pro forma, and psychopathology is analyzed using International Classification of Diseases 10 criteria and MINI scale.

Results and Conclusions: In our study, significant differences between the two groups were found in domicile, employment status, marital status, and duration of stay in prison. History of psychiatric illness before and after the crime is most commonly seen in violent offenders when compared to nonviolent offenders. Significant previous incarcerations were high in nonviolent offenders when compared to nonviolent offenders. In both the groups, more than half of the individuals had either alcohol abuse or dependence pattern, and high rates of substance intoxication at the time of the commission of the crime were found in violent offenders. Less than one-fourth of both groups were found to have psychiatric illness apart from alcohol. Hence, more awareness programs and campaigns regarding the influence of alcohol on the crimes can be conducted with the help of police, government, private organizations, and media, especially directed at vulnerable and at-risk population for crime, would indirectly decrease crime rate by decreasing alcohol consumption. There are a lot of studies in Indian literature regarding the psychopathology in the whole of the prison population and also in violent offenders; but, there are very few studies comparing both violent and nonviolent offenders which are a distinct population.

Keywords: Crime, nonviolent offenders, prisoners, psychopathology, violent

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INTRODUCTION AND REVIEW OF LITERATURE

Several studies have found that mental illnesses are very commonly seen in the prison population when compared to the normal population and they are a major public health concern. The prison population is not homogeneous as it comprises of both violent and nonviolent offenders which are distinct in many ways. Nonviolent offenders appear to be distinct when compared to violent offenders not only in terms of the crimes they committed and the seriousness of the crime but also in terms of the motivation for the act and the punishment they receive. They also differ in their degrees of recidivism,[1] level of intelligence, impulsiveness, spontaneity, and self-control factors.[2] In most of the cases, it is very difficult to differentiate between abnormal personality and criminal behavior and their influence on psychopathology. In the literature, there were many studies done on the entire prison population and also particularly on violent offenders. However, there were very few studies that compared the characteristics and psychopathology of both violent and nonviolent offenders which are distinct in many ways.

According to National Crime Records Bureau,[3] nonviolent crimes are defined as – a crime where no injury or force is used on another person. Nonviolent crimes include bribery, prostitution, theft, cheque bounce, and gambling. Violent crimes are violations of criminal law that involve the intentional use of violence by one person against another. Violent crimes are violations of criminal law that involve the intentional use of violence by one person against another like the Behaviors that intentionally threaten, attempt, or inflict physical harm on others such as homicide, assault, robbery, rape, etc.[3,4] Violence is multifactorial. It is the result of complex interactions between social, cultural, individual, and environmental factors. Homicide and attempt to murder are unique and serious violent offenses, and they have a huge impact on society. In Telangana state, the total number of crimes in 2014 was 106,830, and in 2016, it has increased to 108,991 which constitutes 3.7% of total crimes in India and ranks 6th in India in the crime rate. Furthermore, the total number of violent crimes was found to be 8004, and the rest were nonviolent, with murders accounting to 1046 and the common reasons reported by Crime Records Bureau 2016 were – personal enmity, property disputes, illicit relationships, love affairs, water or money disputes, naxalism, robbery, rape, suspicion of witchcraft, etc., but only 6 murders were due to lunacy, whereas in neighboring state of Andhra Pradesh, murders constituted 1123 of total violent crimes among which none committed homicide by reason of lunacy.[5] It is a common finding in the literature that criminal behavior and psychopathology are interrelated. Psychiatric patients can sometimes present with criminal and also high violent behavior, and on the other hand, criminals can have comorbid psychopathology.

Fazel and Grann had conducted 62 surveys from 12 countries which included 22790 prisoners (study conducted on the whole of prison population). Among men, 3.7% had psychotic illnesses, 10% major depression, and 65% a personality disorder, including 47% with an antisocial personality disorder. Among women, 4.0% had psychotic illnesses, 12% major depression, and 42% a personality disorder, including 21% with an antisocial personality disorder. Which concluded that the prisoners were several times more likely to have psychosis and major depression and about ten times more likely to have an antisocial personality disorder than the general population.[6] Another study showing a high prevalence of mental health problems among the prisoners which reports substance use disorders as the most common mental disorder among prisoners. Substance use disorders and antisocial personality disorders were significantly higher in male participants.[7] Similar findings were reported by many other studies.[8] However, some studies report a lower prevalence of 34% of substance use disorders when compared to other studies.[9,10] In the Indian context, a study done to identify psychiatric morbidity in prisoners in the entire prison population[11] showed that the prevalence of psychiatric disorders was 33%. Psychotic, depressive, and anxiety disorders were seen in 6.7%, 16.1%, and 8.5% prisoners, respectively. 58.8% had a history of drug abuse/dependence before imprisonment. Another study done only on convict prisoners by Goyal et al. found that 23.8% of the convicted prisoners were suffering from psychiatric illness excluding substance abuse.[12] (This low rate could be due to the exclusion of substance use disorders from the psychiatric diagnoses.) A study conducted on 23 violent offenders at Lund University, Sweden to analyze offender characteristics found that they were often single, most of them had no psychiatric diagnoses, the most frequent modus operandi was a knife or sharp weapon, and the most common homicide typology was domestic disputes, and disputes between friends or acquaintances. Based on the analysis, two profiles emerged in the study were one with so-called traditional criminals and another profile overrepresented with offenders who commit domestic crimes.[13]

It was found that male sex, cigarette use, alcohol or other drug use, mental health problems, lacking religious belief/practice, low family income, large family (many siblings), and family or friends involved in the crime were risk factors. All of these risk factors have been found in numerous
studies in high-income countries. Another study directed specifically toward homicidal offenders; 80% of the study population was found to be having had axis 1 or axis 2 diagnoses. A study done by the same authors of the current study on violent offenders in 2018 had found that the majority of the offenders had committed crime under intoxication, perpetuated, and impulsive due to domestic reasons. Even though many Indian and foreign studies focused on psychopathology and personality of the entire prison population, there are a very few comparative Indian studies which specifically focused on sociodemographic characteristics and psychopathology in this specific population of violent and nonviolent offenders. Hence, the current study focussed on how the violent differ from the non-violent offenders.

Aim
To compare the crime characteristics and psychiatric morbidity in violent offenders and nonviolent offenders.

Objectives
1. To compare the sociodemographic characteristics of violent and nonviolent offenders
2. To compare the crime characteristics of both the groups
3. To compare the psychopathology in both the groups.

MATERIALS AND METHODS

Procedure
It is a cross-sectional comparative study, carried out in 100 study participants (65 violent offenders and 35 nonviolent offenders). It is done over a period of 3 months from May 2018 to July 2018 at Cherlapalli central prison, Hyderabad, after getting approval from the institutional ethics committee and research board, and DIG of central prisons, Hyderabad. The central prison caters to offenders for the entire Telangana state. Permission from DIG, the prisons department was taken to carry out the study in the months of May–July 2018. The individuals were included in the study after taking written informed consent. 65 violent convicted trial (CT) offenders involved in crimes such as murder (IPC sec 302) and attempt to murder (IPC sec 307), dacoit, rape, robbery, abetment to suicide, etc., and 35 nonviolent CT offenders involved in nonviolent crimes such as theft, cheating, cheque bounces, surety signs, and printing fake currency were selected using convenient sampling method.

All the individuals were given semistructured intake pro forma which included details such as sociodemographic profile, addiction history before and intoxication during the commission of the crime, history of mental illness before and after commission of crime, past criminal history, family history of mental illnesses and history of criminal background in family and past psychiatric illnesses were diagnosed using International Classification of Diseases 10 (ICD-10) criteria. Current psychopathology and antisocial personality disorder were analyzed using MINI. There were 4 dropouts in violent offenders and 1 dropout in nonviolent offenders as they were unable to fully complete the intake pro forma and so had been removed from the study. Individuals who had serious medical illnesses, deaf and dumb, and those who did not give consent were excluded from the study.

The MINI was designed as a brief structured interview for the major Axis I psychiatric disorders in DSM-IV and ICD-10. Validation and reliability studies have been done comparing the MINI to the SCID-P and the CIDI. The results of these studies show that the MINI has acceptably high validation and reliability scores but can be administered in a much shorter period (mean 18.7 ± 11.6 min, median 15 min) than the above-referenced instruments. It can be used by clinicians, after a brief training session.

Tools
1. Semi-structured intake pro forma
2. MINI international neuropsychiatric interview
3. ICD-10.

RESULTS AND DISCUSSION

Statistical analysis was done using software Statistical Package for the Social Sciences (SPSS) version 21. Mean and standard deviation (SD) are provided for continuous variables and proportion and 95% confidence interval (CI) for categorical variables and significance was tested using Chi-square test.

Our present sample comprised of prisoners who committed, violent offences such as murder (IPC-302) – 48, attempt to murder (IPC307) – 2, dacoit (IPC 390-395) – 2, rape (IPC 376) – 4, kidnap – 1 (IPC 364), and abetment to suicide (IPC 306) – 4 and nonviolent offences such as theft (IPC 457,380) – 8, cheque bounce (IPC 138) – 8, domestic issues – 7, surety sign (IPC 446) – 1, dowry harassment (498 IPC) – 3, fights IPC 320) – 2, fake currency (IPC 489) – 1, not attending summons – 1, and maintenance cases after divorce – 3.

Sociodemographic data
In our study, significant statistical differences between two groups were found in domicile, employment status, marital status, and duration of stay in prison [Table 1]. Non-violent offences like theft, cheque bounce, surety sign, domestic
issues are found in urban population. These crimes don’t usually occur in rural population which is statistically significant in our study [Table 1]. In the sample, nonviolent offenders had more prior convictions before the present incarceration when compared to violent offenders (17.6% and 3.3%, respectively), and most of the violent offenders had done only one crime for which they were incarcerated and the difference was statistically significant ($P = 0.017$). In both groups, none in the family has got any criminal record. Similar findings were found in a study conducted by Aaltonen et al. study which showed violent offenders to have least prior convictions and prison sentences [Table 2].

59.01% of the violent offenders and 55.88% of non-violent offenders showed either substance abuse or dependence pattern of drinking, and similar findings were seen in other studies done on violent offenders by Kumar and Daria [11] [Table 3].

Before the crime, high rate of psychiatric illnesses other than substance abuse was found in violent offenders when compared to nonviolent offenders (18% and 2.9%, respectively), and the difference between the two groups is statistically significant ($P = 0.034$).

The table shows the history of Psychiatric morbidity in offenders which highlights that there is less psychopathology/history of mental illness before the commission of crime with respect to both violent and non-violent offences which breaks the popular myth that crime is more committed by the mentally ill people [Table 4]. However, in the total sample, only 20.9% had psychiatric illnesses other than substance illness before the crime and 21.6% developed illness after crime during the stay in prison.

At present, 6.9% of violent offenders and 11.8% of nonviolent offenders had active psychopathology at the time of the study which was diagnosed according to MINI scale [Table 4]. The most common psychopathology found in our study was alcohol abuse or dependence. 59% of the violent offenders and 55% of nonviolent offenders had substance abuse or dependence pattern before coming to prison. Similar findings were found in another study done by Fazel and Grann [18] and Ayirolimeethal et al. [6] who also found significant psychopathology in prison population which included both violent and nonviolent offenders [Table 5].

The most common crime committed by convict prisoners is murder, and among them, nearly half (47.92%) had a history of alcohol dependence before the commission of the crime.

In the current study according to the Legal classification of index crime, a total of 48 inmates had committed violent offence like murder and among them 25 (52.08%) had no abuse or dependence pattern and 23 (47.92%) had substance abuse/dependence pattern [Table 6].

The substance dependence pattern in other crimes cannot be commented on because of the low sample size.

**CONCLUSIONS**

In our study, significant differences between the two groups were found in domicile, employment status, marital status, and duration of stay in prison. History of psychiatric illness before and after the crime is most commonly seen in violent offenders when compared to nonviolent offenders. Significant previous incarcerations were high in nonviolent offenders when compared to nonviolent offenders. In both the groups, more than half of the individuals had...
Table 3: Substance intake pattern

| Violent offenders (%) | Nonviolent offenders (%) |
|-----------------------|--------------------------|
| No use                | 25 (41.66)               |
| Abuse                 | 20 (32.72)               |
| Dependence            | 16 (26.22)               |

Table 4: Psychiatric morbidity

| Variables                          | Violent offenders (%) | Nonviolent offenders (%) | P       |
|------------------------------------|-----------------------|--------------------------|---------|
| 1. History of psychiatric illness prior to crime | Yes 11 (18) | No 50 (82) | 33 (97.1) | 0.034* |
| 2. History of psychiatric illness after crime | Yes 69 (8) | No 55 (90.2) | 30 (88.2) | 0.786  |
| 3. Current psychiatric illness | Yes 8 (13.1) | No 53 (86.8) | 27 (79.4) | 0.103  |

*P value = <0.05 (significant)

Table 5: Comparison of current psychopathology in both groups

| Psychopathology | Violent offenders (%) | Nonviolent offenders (%) |
|-----------------|-----------------------|--------------------------|
| Substance abuse/dependence | 36 (59.01) | 19 (55.88) |
| Depression      | 7 (11.47)             | 4 (11.7)               |
| Anxiety         | 2 (3.2)               | 2 (5.90)               |
| ASPD            | 1 (1.6)               | 4 (11.76)              |
| Schizophrenia   | 1 (1.6)               | 0                       |

ASPD: Anti-social personality disorder

Table 6: Legal classification of index crime correlated with substance dependence/abuse

| Crime characteristics | Total (n) | No substance abuse or dependence (n) | Substance abuse or dependence (n) |
|-----------------------|-----------|-------------------------------------|----------------------------------|
| Kidnap                | 1         | -                                   | 1                                |
| Murder (%)            | 48        | 25 (52.08)                          | 23 (47.92)                       |
| Attempt to murder     | 2         | 2                                   | -                                |
| Rape                  | 4         | 2                                   | 2                                |
| Dacoit                | 2         | 1                                   | 1                                |
| Betrayal to suicide   | 4         | 2                                   | 2                                |
| Theft                 | 8         | 5                                   | 3                                |
| Fights                | 2         | 2                                   | 1                                |
| Cheque bounce         | 8         | 3                                   | 5                                |
| Surety sign           | 1         | -                                   | 1                                |
| Domestic issues       | 7         | 4                                   | 3                                |
| Fake currency         | 1         | -                                   | 1                                |
| Dowry harassment      | 3         | 1                                   | 2                                |
| Not attending summons | 1         | -                                   | 1                                |
| Maintenance           | 3         | 1                                   | 2                                |

Limitations

Most of the information was taken from prisoners, and there was no means to corroborate the information; so, there is also a possibility of recall bias. In the prison population, some of the subjects refused to take part in the study as they thought that they would be referred to the psychiatric hospital if they participated in the study.

Implications

It is a pilot study conducted to understand the basic characteristics of violent and nonviolent offenders, but future studies should be aimed at understanding the personality profile and comparative studies with female offenders too. Hence, more awareness programs and campaigns regarding the influence of alcohol on the crimes can be projected with the help of police, government, private organizations, and media, especially in vulnerable and at-risk populations. This may lead to reduced consumption of alcohol in the vulnerable population leading to a decrease in crime rate. Modifiable factors such as substance use and psychiatric illnesses can be addressed.

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Conflicts of interest

There are no conflicts of interest.

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