

# A Comparison of Mental Disorders in Two Groups of Prisoners Charged with Premeditated Murder and Kidnapping

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## ABSTRACT

**Purpose:** The current study aimed to compare mental disorders in two groups of prisoners charged with premeditated murder and kidnapping.

**Materials and Methods:** This descriptive study followed a casual-comparative design. The sample of this study included 60 prisoners charged with premeditated murder and 60 prisoners charged with kidnapping selected using simple random sampling method (sortation). To collect data, the Symptom Check List (SCL-90) was used.

**Results:** Results of multivariate analysis of variance indicated a statistically significant difference between these two groups of prisoners charged with premeditated murder and kidnapping regarding mental disorder symptoms ( $F = 9.746$ , Wilks' Lambda = .556,  $P = .00$ ) such that prisoners charged with premeditated murder suffered from higher levels of anxiety, paranoid thoughts and psychosis and prisoners charged with kidnapping suffered more from depression, somatic symptoms, obsession, and phobia ( $P = .01$ ). However, no significant difference was found between prisoners charged with premeditated murder and kidnapping with regard to aggression and interpersonal sensitivity ( $P = .05$ ).

**Conclusion:** The findings of this study revealed that both groups charged with premeditated murder and kidnapping suffer from high means on mental disorder symptoms.

**Keywords:** mental disorder; prison; murder; kidnapping.

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## INTRODUCTION

Prisons have become home to thousands of prisoners who are suffering from mental disorders and poor mental health.<sup>(1)</sup> Mental health disorders among prisoners have consistently exceeded rates of such disorders in the general population.<sup>(2,3)</sup> Several previously conducted studies have shown that the prevalence of mental disorders among prisoners is 5 to 10 times more than that in the general population, such that based on conducted estimates, the

prevalence of mental disorders among prisoners and in the general population is 80% and 31%, respectively.<sup>(4)</sup> High prevalence of mental disorders among prisoners has become a serious issue in prisons.<sup>(5)</sup> Many countries, for more than four decades, have continuously examined and reported high prevalence of mental disorders among prisoners.<sup>(6)</sup> In a study carried out in France examining prisoners' mental disorders, results demonstrated that the prevalence of schizophrenia among male prisoners was

17.9% to 24%, the prevalence of depression was 17.9% to 24%, and the prevalence of anxiety was 12% to 17.7%.<sup>(7)</sup> In another study conducted in England comparing mental disorders among male and female prisoners, results revealed that the prevalence of symptoms of insanity among male and female prisoners was 2%; however, females, compared to male prisoners, suffered from higher levels of mental disabilities (6% vs. 2%), personality disorders (18% vs. 10%), mental disorders (18% vs. 10%) and drug abuse (26% vs. 12%).<sup>(8)</sup> Moreover, one out of every seven prisoners in Western countries suffer from mental illness and/or severe depression which may lead to suicide and one out of every two male prisoners and one out of every five female prisoners suffer from antisocial personality disorder.<sup>(9)</sup> According to Lovell, Gagliardi, and Peterson<sup>(10)</sup> although a large number of prisoners suffer from mental disorders and high levels of stress, very few studies have been carried out on the issue. In fact, since the rules governing the prison environment are seriously harmful to mental health, the prison environment itself creates psychological problems. Moreover, because of losing touch with their families, friends, and acquaintances and losing their jobs, prisoners may lose their mental balance.<sup>(11)</sup> Scientific evidence indicated that the prevalence of mental disorders among prisoners has been increasing over time.<sup>(12)</sup> More importantly, aggression and premeditated murder are significantly related.<sup>(13)</sup> Additionally, studies demonstrated a strong correlation between mental problems and committing crimes.<sup>(14)</sup> Determining the prevalence of prisoners' mental disorders and awareness of their mental health play a key role in expanding health care programs for this vulnerable population.<sup>(15)</sup> Therefore, the present study sought to answer the following question: Considering mental disorder symptoms, is there any significant difference between two groups of prisoners charged with premeditated murder and kidnapping?

## MATERIALS AND METHODS

This descriptive study followed a casual-comparative design. The statistical population included all prisoners charged with premeditated murder and kidnapping. In this study, simple random sampling method (sortation) was applied and 60 questionnaires were distributed among prisoners charged with premeditated murder and 60 questionnaires were distributed among prisoners charged with kidnapping.

### Data Collection Tools

To collect data, the Symptom Check List (SCL-90) was used.

### The Symptom Check List (SCL-90)

The initial form of this scale (SCL-90) was designed by Derogatis, Lipman, and Covi (1973) to indicate psychological aspects of physical and mental patients<sup>(16)</sup> and its final form was revised and developed by Derogatis, Rickels, and Rock (1976).<sup>(17)</sup> This short answer checklist includes 90 5-point items (no = 0, a little = 1, some = 2, high = 3, extreme = 4) that assess nine dimensions which are as follows: 1. Somatic complaints (SOM, 12 items), 2. Obsession(OBS, 10 items), 3. Interpersonal sensitivity (SENS, 9 items), 4. Depression (DEP, 13 items), 5. Anxiety (ANX, 10 items), 6. Aggression(AGG, 6 items), 7. Phobia (PHOB, 7 items), 8. Paranoid ideation(PAR, 6 items), and 9. Psychosis (PSYC, 10 items). The first phase of scoring this scale is to provide a key to calculate the total score of each dimension. To this end, ten keys were developed for calculating 9 dimensions of symptoms and additional questions. In the second phase, the total score of a subject on each dimension was calculated and transferred to a table, in an answer sheet, that is used to record the subject's scores. To obtain the total score of each dimension, all numbers related to each dimension, other than zero, were added together. In the third phase, to calculate the mean of symptoms in each dimension, total scores of the subject in various dimensions of the scale (excluding additional questions) were divided by the number of questions related to each dimension.<sup>(17)</sup> Reliability of this scale has been reported .90 in Iran and .85 in a foreign study.<sup>(18)</sup>

## RESULTS

In this study, the data was collected from 120 prisoners whose descriptive information based on gender, type of crime, age, and level of education is presented in **Table 1**. The obtained results related to the main question of the present study, i. e. Considering the mental disorder symptoms, is there any significant difference between two groups of prisoners charged with premeditated murder and kidnapping?, are demonstrated in **Table 2**. As **Table 2** indicates, results of multivariate analysis of variance show a significant statistical difference between these two groups of prisoners charged with premeditated murder and kidnapping considering mental disorder symptoms ( $F = 9.746$ , Wilks' Lambda = .556,  $P = .00$ ). As **Table 3** demonstrates, results of multivariate analysis of variance indicate a statistically significant difference between two groups of prisoners charged with premeditated murder and kidnapping with regard to their means on seven mental disorder symptoms (somatic complaints, obsession, depression, anxiety, phobia, paranoid thoughts, and psychosis) ( $P = .01$ ), such that prisoners charged with

**Table 1.** Demographic information of prisoners charged with premeditated murder and kidnapping in Zahedan Central Prison

	N	%
<b>Gender</b>		
Male	120	100
Female	0	0
<b>Level of Education</b>		
Illiterate	27	22.5
Elementary school	30	25.0
Middle school	36	30
High school	12	10
Diploma	15	12.5
<b>Type of Crime</b>		
Premeditated murder	50	60
Kidnapping	50	60
<b>Age</b>		
18-25 years old	60	50
26-30 years old	36	30
31-35 years old	15	12.5
36-40 years old	6	5
41-50 years old	3	2.5

premeditated murder, compared with prisoners charged with kidnapping, suffer from higher levels of some mental disorder symptoms including anxiety, paranoid thoughts, and psychosis and prisoners charged with kidnapping suffer from higher levels of some other mental disorder symptoms including somatic complaints, obsession, depression, and phobia; however, regarding means on aggression and interpersonal sensitivity, no significant difference is found between these two groups of prisoners charged with premeditated murder and kidnapping ( $P = .05$ ).

## DISCUSSION

There are more than ten million prisoners all around the world and nearly one million prisoners, in each decade, are added to the world's prison population.<sup>(6)</sup> Even in developed countries, the prison population has dramatically increased in recent decades, to the extent that the number of prisoners in the United States of America, that was one hundred and ninety eight thousand people in 1971, reached one million and six hundred thousand people in 2010. In addition, in this country, the number of female prisons, that was six thousand and three hundred people in 1971, reached one hundred and twelve thousand people.<sup>(14)</sup> One in seven people passing through prisons worldwide suffers from a severe mental disorders.<sup>(19)</sup> Suffering from poor physical and mental health is not uncommon among detainees and prisoners.<sup>(20)</sup> Numerous studies have reported higher prevalence of mental disorders, including depression and personality disorder, among prisoners, compared to the general population<sup>(6)</sup> and several epidemiological studies conducted in various countries have indicated that the prevalence of severe mental disorders among prisoners is 5 to 10 times more than that in the general population.<sup>(15)</sup> Moreover, previously conducted studies demonstrated significant correlations between aggression and premeditated murder<sup>(13)</sup> and between mental problems and committing a crime among prisoners.<sup>(14)</sup> Hodgins, in a study examining mental disorders and committing crimes, found that men with major mental disorders were 2 1/2 times more likely than men with no disorder or handicap to be registered for a criminal offense and were four times

**Table 2.** Statistical indicator of Wilks' Lambda related to mental disorder symptoms in two groups of prisoners charged with premeditated murder and kidnapping

	Wilks' Lambda	F	Level of significance	Effect size	Testability
Groups	0.556	9.746	0.00	0.44	1.00

**Table 3.** Results of multivariate analysis of variance (MANOVA) related to mental disorder symptoms in two groups of prisoners charged with premeditated murder and kidnapping

Variable	Premeditated Murder		Kidnapping		Mean Square	df	Sum of Squares	F	Level of Significance	Effect Size
	Mean	SD	Mean	SD						
Somatic Complaints	2.10	0.82	2.62	1.24	8.13	1	8.13	7.33	0.00	0.05
Obsession	2.06	0.79	2.59	1.23	8.26	1	8.26	7.68	0.00	0.06
Interpersonal Sensitivity	1.81	0.87	1.73	1.16	0.15	1	0.15	0.14	0.70	0.00
Depression	1.64	0.82	2.23	1.26	10.70	1	10.70	9.36	0.00	0.07
Anxiety	2.36	1.05	1.65	1.08	15.05	1	15.05	13.10	0.00	0.10
Aggression	2.02	0.96	2.16	1.53	0.62	1	0.62	0.38	0.53	0.00
Phobia	1.39	1.00	2.02	1.64	11.85	1	11.85	6.40	0.01	0.05
Paranoid Thoughts	2.25	0.88	1.68	1.19	9.53	1	9.53	8.70	0.00	0.06
Psychosis	2.16	1.16	1.60	1.11	9.46	1	9.46	7.27	0.00	0.05

more likely to be registered for a violent offense. Women with major disorders were five times more likely than women with no disorder or handicap to be registered for an offense and 27 times more likely to be registered for a violent offense.<sup>(21)</sup> He also evaluated a birth cohort and found that men with major mental disorders (schizophrenia and major affective disorder) were 2 1/2 times more likely to have committed a criminal offense and four times more likely to have committed a violent offense compared to men without mental disorders. In Brazil, a study conducted in a prison's psychiatric ward indicated a positive association between schizophrenia and other psychoses and violent crimes, particularly homicide.<sup>(22)</sup> Moreover, Hodgins and colleagues conducted a study entitled "Mental Disorder and Crime: Evidence from a Danish Birth Cohort" and concluded that women and men who had been hospitalized in psychiatric wards were more likely to have been convicted of a criminal offense than persons with no history of psychiatric hospitalization. The offenders who were hospitalized committed all types and, on average, as many offenses as did the never-hospitalized group of the same sex.<sup>(23)</sup> Results of a study carried out by Pondé and colleagues indicated statistically significant positive associations between some psychiatric disorders and specific groups of crime, between substance addiction and sex crimes and homicide, between antisocial personality disorder and the crimes of robbery and kidnapping and extortion, between borderline personality disorder and sex crimes, and between alcohol addiction and fraud, conspiracy, and robbery and murder.<sup>(22)</sup> The findings of a systematic study, examining sixty-two previously conducted studies carried out in twelve countries to investigate severe mental disorders among male and female prisoners, have demonstrated that among male prisoners, 3.7% suffer from mental illnesses, 10% suffer from severe depression, 65% suffer at least from one personality disorder, and 47% suffer from antisocial personality disorder. Additionally, among female prisoners, 4% suffer from mental illnesses, 12% suffer from severe depression, 42% suffer at least from one personality disorder, and 21% of female prisoners suffer from antisocial personality disorder. However, incidences of psychosis and severe depression among prisoners are higher than what were mentioned in these studies. Prisoners are ten times more likely to suffer from antisocial personality disorder compared to the general population.<sup>(24)</sup>

## CONCLUSIONS

Given the high prevalence of mental and psychiatric

problems among prisoners, gaining knowledge related to mental disorders aiming at reducing them seems essential.<sup>(25)</sup> Since a significant number of prisoners suffer from mental health problems<sup>(26)</sup> and given the significant relationship between aggression and premeditated murder and other kinds of crime, identifying people at risk of violence and providing mental health treatment services for them seem necessary. Providing these services and identifying highly violent people with high levels of mental disorders decrease many crimes such as premeditated murder, kidnapping and the like.<sup>(13)</sup> Thus, changes should be considered to prison policies and programs to rise motivation for better future in prisoners, creating positive changes in prisoners' attitude toward rules and regulations, social interactions, and communication, which can provide the ground work for major changes in prisoners' character.

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## CONFLICT OF INTEREST

None declared.

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