

# MENTAL DISORDERS IN 30 MILITARY HOMICIDE OFFENDERS: KILLING CIRCUMSTANCES AND RELATIONSHIP WITH VICTIMS

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## ABSTRACT

**Objective:** To evaluate military homicide offenders for mental disorders and describe modes of killing and relationships with their victims.

**Methods:** Thirty perpetrators at the Correction and Rehabilitation Military Center in Jordan were interviewed and psychiatrically assessed using the ICD10 as a reference. Demographic characteristics of perpetrators, their relationship to victims and types of weapons used were recorded. Psychiatric diagnoses and demographic data were compared to those of 30 prison inmates who had charges other than homicide.

**Results:** Compared to the control group, the homicide offenders did not differ in age or duration of military service. Homicide offenders had higher level of education (60% vs. 30% high school  $P=0.01$ ) and more were married (63% vs. 33%,  $P>0.01$ ). Diagnosis of neurotic disorder was more common in homicide offenders, but there were no significant differences in rates of personality disorder, substance misuse, and psychosis. Eighty percent of homicide offenders used firearms and 87% were acquainted with their victims.

**Conclusion:** Non-psychotic psychiatric disorders were common in the homicide sample. The most common mode of killing was by firearm, and most perpetrators were related to their victims.

**Key words:** Homicide, Military prison, Mental disorder, Victims

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## Introduction

Killing of an individual is the highest level of aggression found in all cultures. Modes and circumstances of killing of the victims vary over time and are influenced by the cultural background of a country. Crime rates have increased dramatically all over the world in recent years. Many studies have repeatedly shown elevated rates of violence in people with mental disorder compared to the general population,<sup>(1)</sup> but there is little evidence of an increasing number of violent acts by psychotic patients over time.<sup>(2)</sup> Prevalence of mental disorder in people convicted of homicide in particular has been studied. Some reports showed substantial rate of mental disorder in homicide offenders but most of them did not

have severe mental illness or history of contact with psychiatric services.<sup>(3)</sup> On the other hand, Petersson and Gudjonsson<sup>(4)</sup> who studied all 52 homicides in Iceland between 1900 and 1979 found strikingly high rates of psychosis (28%) in offenders, with the majority having schizophrenia; another 33% had personality disorder, alcohol and drug dependence or neurosis, and over 60% of the offenders were under the influence of alcohol at the time of the crime. It is likely that in countries with low homicide rates (e.g. in Scandinavia), the proportion of homicides committed by mentally ill is higher than in countries with high homicide rates (e.g. USA).

Many other studies have shown that mental disorders are over-represented in homicide offenders in different countries, nevertheless the risk of homicidal

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attack by seriously mentally ill patients was estimated to be small,<sup>(5)</sup> and the risk of suicide was about one hundred times greater.<sup>(6,7)</sup> The continuing concern of estimating the frequency of association between various kinds of mental disorder and crime is of great value in helping to determine the nature and extent of facilities required for appropriate psychiatric treatment to reduce the risk to minimal levels.<sup>(7)</sup>

The crime rate in Jordan is very low compared to industrial countries, with the exception of murder. An analysis was done using INTERPOL data for Jordan, and was compared with Japan (country with a low crime rate) and USA (country with a high crime rate). According to INTERPOL data, for murder, the rate in 1999 was 6.33 per 100,000 population for Jordan, 1.00 for Japan, and 4.55 for USA.<sup>(8)</sup>

Daradkeh<sup>(9)</sup> in a previous study had shown absence of major psychiatric disorders among violent offenders in Jordan. No similar studies have been conducted among the military prison population.

## Methods

Thirty-four servicemen who had killed and were convicted, or remanded to the military prison in Zarqa, waiting for trial, were approached between 2000 and 2003, and asked to take part in this study. Four men were excluded from the sample after finding that they were charged with unintentional homicide, leaving 30 men charged or convicted with homicide. All offenders were interviewed by a forensic psychiatrist. Each interview lasted for at least 45 minutes and involved 26 offenders; the other 4 men were referred by court for mental evaluation and were admitted to the psychiatric ward at the Royal Jordanian Medical Services for at least two weeks, where mental state for each man was assessed by three specialist psychiatrists. All diagnoses were based on the ICD-10 Classification of Mental and Behavioral Disorders.<sup>(10)</sup> Other information was collected using prison, court, or medical records if present, meeting relatives, and if possible getting military records from the units they were serving in.

The interviewer recorded the psychiatric diagnosis if present, history of drug and alcohol misuse and its association with the crime, demographic data, and relationship with the victims and their gender, circumstances of the killing, frequency of previous violence and types of weapons used.

Clinical and social characteristics of the homicide offenders were compared with those of a control group involving 30 prison inmates who had charges and convictions other than homicide (absconded from military service, stealing and fraud). All control offenders were admitted to the psychiatric ward in the Royal Jordanian Medical Services upon court order for psychiatric evaluation and reporting during the same time period of this study.<sup>(11)</sup>

## Statistics:

Comparisons of the two groups were done by using chi square test. The significance level was set at  $p=0.05$  and t-test was used to compare the means.

## Results

### Demographic characteristics (Table I):

All study subjects were males, 5 were convicted, and serving their sentence in prison, and 25 were remanded awaiting trial. Their mean age was 26.5 years (range 18-36) and mean duration of service was nine years. Four were officers and the rest were noncommissioned servicemen including 13 (43%) soldiers. Most homicidal subjects ( $n=19$ , 63.3%) were married and had children, 18 (60%) had high school education and four (13.3%) were university graduates. The control group mean age was 27.2 years; mean years of service 9.8 years, and 70% had elementary education.

**Table I.** Demographic data of homicide and other offender groups

Demographic Characteristics	Groups	
	Homicide offenders N=30	Other offenders N=30
Age (years): Mean	26.5	27.2
Range	18-36	21-35
Marital status: Married	19 (63.3%)	10 (33.3%)
Single	11 (36.7%)	20 (66.7%)
Education: University	4 (13.3%)	-
High school	18 (60%)	9 (30%)
Elementary	8 (26.7%)	21 (20%)
Military rank: Officer	4 (13.3%)	-
Others	26 (86.7%)	30 (100%)
Duration of service: Mean (years/months)	9	9.8

### Mental disorders (Table II):

Fifteen offenders (50%) who had killed had the diagnosis of personality disorder mostly antisocial type compared with 12 (40%) in the controls. Neurotic disorders were found in 24 (80%) of the homicidal group and in nine (30%) of the controls ( $P<0.001$ ). History of alcohol and drug (substance) misuse was reported in 14 (47%) of the homicide group and eight (27%) of the control group ( $P>0.05$ ). This diagnosis was found in 95% of the personality disordered homicide group. Nine (30%) offenders admitted consuming alcohol prior to the killing, all of them having the diagnosis of personality disorder. History of previous violence was reported in 25 (82%) of the homicide offenders although in most of the incidents no charges were pressed. A high rate (77%) of co-morbidity was found among the homicide group; mainly personality disorder and substance abuse. None of the homicide offenders had a previous contact with psychiatric services.

**Table II.** Comparison between homicide and other offender groups regarding psychiatric diagnosis

Diagnosis	Homicide Off. N (%)	Other offenders N (%)	Significance
Psychosis	-	2 (6.7)	
Neurotic disorder	24 (80)	9 (30)	P<0.001
Personality dis.	15 (50)	12 (40)	P>0.05
Substance misuse	14 (47)	8 (27)	P>0.05
Organic conditions	-	2(6.7)	

**Types of weapons, circumstances of the killing and the victims:**

In twenty-four (80%) incidents firearms were used, four (13%) used sharp instruments during physical fights, one perpetrator used chemical agent to fatally burn his mother, and another one used a rock to end his lover’s life.

There were 39 victims, 24 (61.5%) males and 15 (38.5%) females (male : female ratio 1.6: 1). Two mass killings took place involving seven schoolgirls and three men. Three females were killed by their brothers, one by her son, a wife by her husband and another female was killed by her blood relative fiancé, all in the contest of what is called “honor murders”. Most male victims were killed for revenge or as a result of dispute between relatives.

**Discussion**

The findings of this study were based on interviewing inmates in a military prison. There is no reason to believe that they differ significantly from those in other civilian prisons except for the fact that the availability and easy access to firearms among military personnel could explain the high rate of using them as a mode of killing (80%). Criminological studies showed that about a third of all homicides in Britain involve a sharp instrument, but less than 10% a firearm.<sup>(7)</sup> The same order was found in studies in Sweden<sup>(12)</sup> and Nigeria,<sup>(13)</sup> but not in the USA where firearms were most commonly used in homicide.<sup>(7)</sup>

Shaw *et al.*<sup>(3)</sup> in their national survey in 1999 found that the commonest diagnosis in people convicted of homicide in England and Wales was personality disorder (22%). Maden *et al.* in 1994,<sup>(14)</sup> found that 10% of the male sentenced prison population in England and Wales were having personality disorder. Office for National Statistics Prison Survey (1997) in England and Wales reported 78% of remanded males and 64% of sentenced male to have personality disorder.<sup>(15)</sup> The estimates of high rates (50%, 40% in study and control samples) of personality disorder in

this study accord with the findings of other studies.<sup>(3,14,15)</sup>

In this study, high rates of anxiety and depressive symptoms were reported by homicide offenders. All of them were remanded and are living the anticipation of being convicted and facing the capital punishment. No psychotic illness could be elicited in the homicide group and this finding supports the absence of major psychotic disorders among violent offenders reported by a previous study in Jordan.<sup>(9)</sup> The difference of the rates of mental disorders between homicide and non-homicide offender groups was non-significant except for neurotic disorder.

Alcohol and drug misuse was also common and highly associated with personality disorder in the homicide group in this study. Soyka in 2000<sup>(16)</sup> in his detailed review of literature found that substance misuse had the highest association with personality disorder followed by schizophrenia, and that was associated with the highest rates of violent crimes.

Regarding circumstances of crimes and relationships with the victims, the findings of this study may reflect the nature of the Jordanian society and its cultural background. Most of the victims were blood related or known to the perpetrators. Men were mostly killed either for revenge or due to inter/intra-family conflicts over money or land. Apart from one politically driven mass killing involving seven schoolgirls, all female victims were killed by their blood or marriage relatives which is not uncommon in Jordan and is facilitated by providing excuses and diminished punishment levels for the perpetrator by the law if “defending honor” is produced as a defense. International epidemiological studies repeatedly revealed that the psychotic offenders usually kill their relatives, and perpetrators who kill strangers are less likely to have a history of mental disorder, and the crimes are more likely to be related to drug and alcohol misuse.<sup>(17)</sup>

**Conclusions**

Personality problems, substance misuse and neurotic disorder co morbidity were over represented among homicide offenders at the military prison in Jordan. Most perpetrators and victims were related and firearms were most frequently used as modes of killing. Access to weaponry – given the dramatically increased chance of a fatality consequent upon its use- places an extra demand on psychiatric risk assessment of servicemen demonstrating abnormal mental state by the service psychiatrist. Psychiatrists need to give advice to prevent access to live arms or dangerous environments.

Initiating studies in other prisons, to estimate the prevalence of mental disorder in violent offenders is highly recommended in order to direct efforts for proper treatment facilities, in an attempt to reduce level of crime.

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