

# Psychological distress among Prisoners in Bagdad city, Iraq

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**Abstract-***Psychological disorders are further common between the prison; No search is known for mental disorders in Iraq's prisons, and forensic psychiatry services are available for those who suffer from them. This study highlights to determine the rate of psychological distress among prisoners in Iraq. The determination of this study continued to assess the levels of psychological distress amid prisoner in prisons of Baghdad, Iraq. A descriptive study was exposed from January 20<sup>th</sup> 2020 to May 1<sup>st</sup> 2020 on prisoners in Baghdad City. Appropriate samples from 100 prisoners chosen from eight prisons in the city of Baghdad. The study uses the self-management questionnaire. Psychological distress was measured using the Kessler Psychological Distress Scale (K10). The data has been analyzed by using the descriptive statistics (Frequencies, Percentages, Means and Standard Deviations (SD) and the inferential statistics (Chi-square to find out the relationships between the socio-demographic and clinical characteristics and the levels of psychological distress). The results of the current study exposed that two-thirds of all defendants suffer from moderate to severe psychological distress and there is a close relationship between age, gender, prison period, and the period of the expiration of the social situation with psychological distress.. The study concluded that the levels of psychological distress among prisoners were moderate to high and there are many variables are positively associated with distress level.*

**Keyword:** Psychological distress, Prisoners.

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## INTRODUCTION

There are about 10 million people in prison worldwide, most of whom live in low- and middle-income countries <sup>[1]</sup>. Many people all over the world suffer from a mental disorder [2]. Numerous studies conducted over the past two decades have shown an increased prevalence of mental disorders among prisoners, compared to rates observed in the general population [3]

This could be due to overloading, various forms of violence, lack of privacy, lack of meaningful activity, isolation from social networks, insecurity about future expectations (work, relationships, etc.), and insufficient health services, especially mental health services, in prisons <sup>[4-5]</sup>.

A study between prisoners Wales and in England <sup>[6]</sup> showed that 63 % of prisoners had psychological distresses. Furthermore, 70 % of prisoners in Ghana <sup>[7]</sup>, 83.4 % of Ethiopia <sup>[8]</sup> and 57 % of prisoners in Nigeria <sup>[9]</sup> experienced psychological distress.

Depositing in prison represents an exorbitant psychological burden on the prisoner, and this leads to many psychological pressures, and these pressures have different effects with different inmates, in terms of their psychological fitness, i.e. their ability to with stand psychological pressures or what is sometimes called hunting frustration <sup>[10]</sup>.

Prison is an environment that represents severe pressure on inmates, and this stressful environment is represented with the conditions of the prisoner from a psychological, social and economic point of view. The landing of the person falls so that the prisoner is exposed to many types or forms of psychological disturbances of course, this severity varies from person to person, but it is generally a disorder that we expect prisoners to endure to one degree or another <sup>[10]</sup>.

purpose of the current study was to document the levels of mental disorders in the largest remand prison of this country. It was also to offer a full description of the association between mental health problems, substance abuse and somatic disorders.

## Methodology

### Study setting and design

A descriptive-analytic study was directed to govern the levels of psychological distress and its associated factors among prisoners found in prisons of Baghdad capital of Iraq country from January to February 2020. There are 8 prisons in the Baghdad city the total number of prisoners in eight prisons in the region 22909 prisoners. Two prisons were selected for a sample from the

current study. The numbers of prisoners found in 8 prisons in the region were 22,590; two prisons were selected for sample of the current study.

### **Sampling procedure**

A purposive (non-probability) sample was selected for the study which includes (100) men and women prisoners. Prisoners with a serious illness were excluded from the study. Those intentionally chosen for the interview method were provided with information about the study and written informed consent documents to help them decide whether or not to participate.

### **Instrument of the study**

Data was collected through using semi-structured interview administered questionnaire taking two parts. The first part contains socio-demographic characteristics of the prisoners. The second part of the questionnaire assesses prisoner's psychological distress by using the Kessler Psychological Distress Scale (K10). The K10 scale involves 10 questions about psychological states, each with five-level response scale. Reliability test determined by using internal consistency of the tool was (Cronbach's Alpha: 0.89) and validity of this tool was determined through panel of 10 experts.

### **Statistical analysis**

Statistical analysis was performed using SPSS (Statistical Package for Social Sciences) version 20.0. Frequency and percentage was used to describe of socio-demographic characteristics. Mean of score was used to describe the level of psychological distress .Pearson's chi square test was used to find out the association between psychological distress and demographic characteristics of the prisoners The value of  $p < 0.05$  was considered statistically significant.

## **RESULTS AND DISCUSSION**

Table 1 shows that the age range of the participants was varied from 20 to 50. The highest percentage is located within the age group of thirties (39.0%). Table 1 indicates also that the majorities of participants of the study are male and represents 70.0%. The participants with the level of secondary represent the majority (42.0%) and the rest are scattered as with college and more. 26 (26.0%) and 22 (22.0%) are with primary levels. Most of period of imprisonment are 32 years (32%); about half of them are married; 39(39.0%) of participants have a monthly income inadequate and 31.0 % almost adequate ; and in regard to occupation before imprisonment (70.0%) are with jobless; 30(30.0%) are with period to elapse (1-5 y). while most of the prisoner lives in rural 90 (90.0%).According to the marital status 69.0% represent married.

Table 3 gives the details regarding the distribution of participants within the levels of psychological distress as 35.0% having High level; 33.0% having Moderate level; 32.0% having Mild Table 2. Distribution in stages of psychological Distress according to demographic characteristics of the prisoners; about more than half of the male participants (23.0%); 12.0% of thirties of age; 21.0% of married; 13.0% with college levels of education; 14.0% of participants have adequate-monthly income; 30.0% who living in rural; and lastly, 12.0% with period of imprisonment have high levels of psychological distress level.

Regarding the association among studied variables and demographic characteristics of the Prisoners table 4. indicates that significant association between period to elapse and psychological distress ( $\chi^2 = 7.7$ , p-value= 0.05); period of imprisonment and psychological distress ( $\chi^2 = 13.03$ , p-value= 0.01); gender and psychological distress ( $\chi^2 = 9.42$ , p-value= 0.02). Marital status and psychological distress ( $\chi^2 = 11.42$ , p-value= 0.01).

**Table 1. Demographic characteristics of the prisoners participated in the study.**

<b>Gender</b>			<b>Place of Residency</b>		
<b>Gender</b>	<b>f</b>	<b>%</b>	<b>Place</b>	<b>f</b>	<b>%</b>
Male	70	70.0%	Rural	90	90.0%
Female	30	30.0%	Urban	10	10.0%
<b>Total</b>	<b>100</b>	<b>100.0%</b>	<b>Total</b>	<b>100</b>	<b>100.0%</b>
<b>Age</b>			<b>Level of Education</b>		
<b>year</b>	<b>f</b>	<b>%</b>	<b>Level</b>	<b>f</b>	<b>%</b>
20-29	19	19.0%	Illiterate	10	10.0%
30-39	39	39.0%	Primary	22	22.0%
40-49	29	29.0%	Secondary	42	42.0%
≥50	13	13.0%	College and more	26	26.0%
<b>Total</b>	<b>100</b>	<b>100.0%</b>	<b>Total</b>	<b>100</b>	<b>100.0%</b>
<b>Period of imprisonment</b>			<b>Period to elapse</b>		
<b>Year</b>	<b>f</b>	<b>%</b>	<b>Year</b>	<b>f</b>	<b>%</b>
≤5	18	18.0%	<1	22	22.0%
6-10	32	32.0%	1-5	30	30.0%
11-15	18	18.0%	6-9	16	16.0%
16-20	20	20.0%	10-14	22	22.0%
≥21	12	12.0%	≥15	10	10.0%
<b>Total</b>	<b>100</b>	<b>100.0%</b>	<b>Total</b>	<b>100</b>	<b>100.0%</b>
<b>Occupation before imprisonment</b>			<b>Income</b>		
<b>Occupation</b>	<b>f</b>	<b>%</b>	<b>Income</b>	<b>f</b>	<b>%</b>
Jobless	70	70.0%	Adequate	30	30.0%
Employee	2	2.0%	Almost adequate	31	31.0%
Self-employer	28	28.0%	Inadequate	39	39.0%
<b>Total</b>	<b>100</b>	<b>100.0%</b>	<b>Total</b>	<b>100</b>	<b>100.0%</b>
<b>Marital status</b>					
<b>Status</b>			<b>f</b>	<b>%</b>	
Unmarried			23	23.0%	
Married			69	69.0%	
Divorced			7	7.0%	
Widowed			1	1.0%	
<b>Total</b>			<b>100</b>	<b>100.0%</b>	

**Table 2. Distribution in levels of psychological Distress according to demographic characteristics of the prisoners**

Demographic Characteristics		Levels of Psychological Distress							
		Low		Moderate		High		Total	
		f	%	f	%	f	%	f	%
Age	20-29	6	6.0%	3	3.0%	10	10.0%	19	19.0%
	30-39	12	12.0%	13	13.0%	14	14.0%	39	39.0%
	40-49	10	10.0%	12	12.0%	7	7.0%	29	29.9%
	≥50	4	4.0%	5	5.0%	4	4.0%	13	13.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Gender	Male	23	23.0%	27	27.0%	20	20.0%	70	70.0%
	Female	9	9.0%	6	6.0%	15	15.0%	30	30.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Period of Imprisonment	≤5	3	3.0%	7	7.0%	8	8.0%	18	18.0%
	6-10	12	12.0%	8	8.0%	12	12.0%	32	32.0%
	11-15	6	6.0%	5	5.0%	7	7.0%	18	18.0%
	16-20	7	7.0%	8	8.0%	5	5.0%	20	20.0%
	≥21	4	4.0%	5	5.0%	3	3.0%	12	12.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Period to elapse	≤1	4	4.0%	11	11.0%	7	7.0%	22	22.0%
	2-5	12	12.0%	6	6.0%	12	12.0%	30	30.0%
	6-9	2	2.0%	7	7.0%	7	7.0%	16	16.0%
	10-13	8	8.0%	7	7.0%	7	7.0%	22	22.0%
	≥14	6	6.0%	2	2.0%	2	2.0%	10	10.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Marital status	Unmarried	7	7.0%	4	4.0%	12	12.0%	23	23.0%
	Married	21	21.0%	27	27.0%	21	21.0%	69	69.0%
	Divorced	3	3.0%	2	2.0%	2	2.0%	7	7.0%
	Widowed	1	1.0%	0	0.0%	0	0.0%	1	1.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Occupation	Jobless	24	24.0%	25	25.0%	21	21.0%	70	70.0%
	Employee	7	7.0%	8	8.0%	13	13.0%	28	28.0%
	Self-employee	1	1.0%	0	0.0%	1	1.0%	2	2.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Monthly Income	Adequate	14	14.0%	7	7.0%	9	9.0%	30	30.0%
	Almost adequate	8	8.0%	13	13.0%	10	10.0%	31	31.0%
	Inadequate	10	10.0%	13	13.0%	16	16.0%	39	39.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Level of Education	Illiterate	2	2.0%	4	4.0%	4	4.0%	10	10.0%
	Read & write	1	1.0%	0	0.0%	2	2.0%	3	3.0%
	Primary	4	4.0%	9	9.0%	6	6.0%	19	19.0%
	Secondary	12	12.0%	14	14.0%	16	16.0%	42	42.0%
	College	13	13.0%	6	6.0%	7	7.0%	26	26.0%
	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
Residence	Rural	30	30.0%	28	28.0%	32	32.0%	90	90.0%
	Urban	2	2.0%	5	5.0%	3	3.0%	10	10.0%

	<b>Total</b>	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>
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**Table 3. Distributing levels of Psychological Distress according to the prisoners**

	<b>Levels of Psychological Distress</b>							
	<b>Low</b>		<b>Moderate</b>		<b>High</b>		<b>Total</b>	
<b>Psychological Distress</b>	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>
	<b>32</b>	<b>32.0%</b>	<b>33</b>	<b>33.0%</b>	<b>35</b>	<b>35.0%</b>	<b>100</b>	<b>100.0%</b>

**Table 4. Association between Demographic Characteristics of the prisoners and Psychological Distress .**

		<b>Psychological Distress</b>		
		<b><math>\chi^2</math></b>	<b>df</b>	<b>p-value</b>
<b>Demographic Characteristics</b>	<b>Age</b>	8.69	3	0.04
	<b>Gender</b>	9.42	1	0.02
	<b>Period of Imprisonment</b>	13.03	4	0.01
	<b>Period to elapse</b>	7.74	4	0.05
	<b>Marital Status</b>	11.42	3	0.01
	<b>Occupation</b>	3.40	2	0.49
	<b>Monthly Income</b>	5.18	2	0.27
	<b>Level of Education</b>	4.64	4	0.37
	<b>Residency</b>	2.55	1	0.87

## **Conclusion**

The study concluded that the levels of psychological distress among prisoners were moderate to high, refer the prisoners are highly vulnerable to psychiatric disorders. Study results also show there is an urgent need to improve the mental health care of all prisoners during their time in prison. The researchers suggested work to provide psychologists, and activate their role in psychological counseling in the prison environment to do their part in relieving the psychological pressures experienced by prisoners.

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**Conflict of interest:** None to declare.

**Ethical clearance:** Pilot protocols were approved under the College of Nursing / University of Baghdad, Iraq and all experiments were performed according to the approved guidelines.



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