

# Prevalence of Personality Disorders among Female Sentenced Prisoners in Erbil Adult Reformatory Prison

\*Asmaa Ghanim Hussein, \*\*Ahmed Ali Rasool

\*Department of Medicine, Medical College, Hawler Medical University

\*\* Nursing College, Hawler Medical University

## Abstract:

**Background:** Personality Disorder is “an enduring pattern of inner experiences and behavior that deviates markedly from the expectations of the individual’s culture.

**Aim of the study:** To determine the prevalence rate of personality disorders among female sentenced prisoners and its correlation between socio-demographic and crime characteristics with the types of personality disorders of the study population.

**Patients and Methods:** Quantitative, descriptive study was conducted in Erbil Adult Reformatory Prison in Erbil City in Iraq, from October 2014 to August 2015. The study population included 26 adult females. The Questionnaire was consisting of three parts; the first part included sociodemographic characteristics of female sentenced prisoners, the second part contain the crime characteristics, and the third part was composed of a standardized questionnaire which is based on the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, that consists of three clusters A, B, and C of personality disorders. Correlation coefficient r-test was calculated for obtaining the reliability of the questionnaire and the content validity was determined through 10 experts.

**Results:** Showed that most of the study sample was in the age group between 18-27 years old. Majority of the samples were illiterate, married, house wife and from urban area. Theft was the most common crime. The highest prevalence of personality disorders was the schizoid personality disorder.

**Conclusions:** All types of personality disorders have a non-significant relationship with the sociodemographic characteristics of age, education, marital status, and with crime characteristics of study sample.

**Keywords:** Diagnostic, Personality Disorder, DSM 5, socio-demographic.

## Introduction:

Personality is the totality of emotional and behavioral characteristics that are particular to a specific person and that remain somewhat stable and predictable over time (Townsend, et al., 2008). Personality Disorder is “an enduring pattern of inner experiences and behavior that deviates markedly from the expectations of the individual’s culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment” (Smith, 2010).

According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text-Revision (DSM-IV-TR), personality disorders are “severe mental disorders characterized by invasive pattern of thought, inner experience and behavior that deviates markedly from the expectations of one’s culture” (Maranon, et al., 2010).

Personality disorders categorizes into three clusters, A, B, and C, with each including several personality disorders. The 10 personality disorders are

categorized into the clusters based on descriptive similarities, symptomatology, personality traits and behavioral observations (APA, 2013). Prevalence of personality disorders is high in prison population when compared to the general population. In a systematic review of 62 surveys, it was reported that (42%) of sentenced women had personality disorders and (21%) had anti-social personality disorders. The common saying about prisons is that it houses the “SAD, MAD and BAD” of the society. Sad indicates that at least (50-75%) of the prison population suffers from depression; Mad depicts that at least (15-30%) of them have other mental illnesses and Bad suggests that (10-20%) of them are psychopaths. Persons suffering from personality disorders have their reasoning powers fully intact (Math, et al., 2011). Personality disorders are associated with a significant burden on the individuals with the disorder, those around them and on society in general, and also it is a high risk for developing mental illness and suicide (Coid, et al., 2006).

Personality disorders also predict disability in various life domains; interpersonal, professional, emotional and global functioning are all impaired, and rates of criminality are increased among patients with personality disorders. These disorders also lead to higher levels of unemployment rates and to more problems with coworkers (Lahti, 2012). The studies suggest that, in addition to hereditary predispositions, the risk of personality disorders is associated with increased levels of early life environmental adversity. There are, however, methodological limitations inherent to such cross-sectional studies using retrospective accounts of early life

factors (Hardt & Rutter, 2004). The percentage of women meeting criteria for personality disorders was more than twice that of men according to Sainsbury Center for Mental Health (SCMH, 2013), for the above reasons the researcher intended to assess the prevalence of personality disorders among this population in Erbil.

### **Materials and Methods:**

The study is Quantitative, descriptive, and was conducted in Erbil Adult Reformatory Prison in Erbil City -Iraq. It lasted from 17<sup>th</sup> October 2014 to 17<sup>th</sup> August 2015. The study sample included 26 adult sentenced females. Inclusion criteria are having desire to participate. Exclusion criteria are prisoners who diagnosed by a psychiatrist suffering from any Axis I mental illnesses. The validity of the questionnaire was checked initially by 10 experts with 21 years mean of experience from different related specialties. The expert responses were based on agreement or disagreement with items of questionnaire. The researcher took into consideration their responses. A pilot study was carried out on five patients to determine the reliability of the questionnaire. The pilot study sample was selected from the Erbil Adult Reformatory Prison in Erbil City of the Kurdistan Region-Iraq. After 15 days the same sample was selected to ask the same items in the questionnaire. The alpha correlation coefficient was computed, and the correlation was 0.852, which was statistically adequate. The data was collected through using standard questionnaire depending on (DSMV), which was consisting of three main parts: part one: Socio-demographic characteristics, part two: Crime characteristics, part Three: diagnostic

Criteria of Personality Disorders. This part based on DSMV. This part consists of three clusters of Personality Disorders each cluster has types of personalities, if the participant has four-five positive symptoms it was considered that she has this type of personality disorder. The questionnaire translated to Kurdish Language to be more understandable by the study samples then re-translated to English language.

### **Ethical Considerations:**

This study approved by ethical consideration committee at College of Nursing of Hawler Medical University, Hawler Medical University - College of Nursing, and Ministry of Labor and Social Affairs- General Directorate of Erbil Labor and Social Affairs. Orally informed consent were took from the prisoners who participate in this study before asking the content of this questionnaire, and each of them had right to leave the process at any time even when the data collection was not completed.

### **Results:**

Socio-demographic characteristics of female sentenced prisoners

Table (1) shows the following characteristics of the sample regarding to the socio-demographic information: Regarding the age group, most of the study sample was in the age group 18–27 years old (73.1%); others were distributed between 28-37 and 38-47 years old and form (15.4%) and (11.5%) respectively. Educational levels of the study sample were distributed according to the following levels: illiterate (34.6%), able to read and write (26.9%), graduated from primary school (19.3%), graduated from intermediate or secondary school (11.5%), and

graduated from higher education (institute or university) (7.7%). Regarding the marital status, more than half of the study samples were married (53.8%) others were single, widowed, separated, and divorced which distributed as (15.4%), (15.4%), (7.7%), and (7.7%). Concerning the occupation before arrest, most of the study samples were housewives (73.1%), the others were students and paid workers (19.2%) and (7.7%). Relating to the residential area; the highest percentage of the study samples were from urban area (76.9%), and the others were from rural area (23.1%).

Crime characteristics of female sentenced prisoners table (2) shows the characteristics of crimes among the study sample and there were six types of crime available among the study sample which distributed is as following: Crimes of theft (30.8%), murder (26.9%), prostitution (19.3%), infidelity (11.5%), terror (7.7%), and forgery (3.8%). Regarding the crime circumstance, the highest percentage of the study sample was in a group circumstance (69.2%) and the individual circumstance was (30.8%). The previous sentence and times (recidivism); most of the study sample was with no previous sentence (92.3%) and only 2 prisoners (7.7%); both had previous sentence of more than one time. Prevalence of personality disorders among female sentenced prisoners. Table (3) shows that the highest prevalence of personality disorders among the study sample was schizoid personality disorder (88.5%), but the lowest was histrionic personality disorders (11.5%). The prevalence of the other types of the personality disorders were started from (15.3%) to (76.9%). Association between socio-demographic

characteristics of study sample and types of personality disorders table (4) shows that there were a non-significant relationship between socio-demographic characteristics of the study sample and all types of personality disorders ( $P=$

0.094, 0.534, 0.245, 0.884, and 0.177). The relationship between types of crime and personality disorders in table 5 shows that there were non-significant relationship between types of crime and all types of personality disorders.

**Table (1):** Sociodemographic characteristics of female sentenced prisoners.

Socio-demographic characteristics (n=26)		F	%
Age Group (years)	18-27	19	73.1
	28-37	4	15.4
	38-47	3	11.5
Educational level	Illiterate	9	34.6
	Able to read and write	7	26.9
	Graduated from primary school	5	19.3
	Graduated from intermediate or secondary school	3	11.5
	Graduated from higher education	2	7.7
Marital status	Single	4	15.4
	Married	14	53.8
	Separated	2	7.7
	Divorced	2	7.7
	Widowed	4	15.4
Occupation before arrest	Paid work	2	7.7
	Self-employed	0	0.0
	Non-paid work	0	0.0
	Student	5	19.2
	House wife (unemployed)	19	73.1
	Retired	0	0.0
Residential area	Urban	20	76.9
	Rural	6	23.1

**Table (2):** Crime characteristics of female sentenced prisoners (Some has more than one personality disorder).

Crime characteristics (n=26)		F	%
Types of crime	Theft	8	30.8
	Murder	7	26.9
	Prostitution	5	19.3
	Infidelity	3	11.5
	Terror	2	7.7
	Forgery	1	3.8
Crime circumstance	Individual	8	30.8
	Group	18	69.2
Previous sentence( recidivism)	No	24	92.3
	Yes	2	7.7
If yes, how many times	$\geq 1$	2	100

**Table (3):** Prevalence of personality disorders among female sentenced prisoners.

Personality disorders	F	%
Paranoid	20	76.9
Schizoid	23	88.5
Schizotypal	8	30.8
Antisocial	15	57.7
Borderline	10	38.5
Histrionic	3	11.5
Narcissistic	4	15.3
Avoidant	17	65.4
Dependent	8	30.8
Obsessive	12	46.2

**Table (4):** Association between socio-demographic characteristics of study sample and types of personality disorders (n=26).

K: kw

Socio-demographic Characteristics		Personality disorders										P-Value Significance of Kendall's test & Dec.
		Paranoid	Schizoid	Schizotypal	Antisocial	Borderline	Histrionic	Narcissistic	Avoidant	Dependent	Obsessive	
Age Group (years)	18-27	15	16	7	11	9	3	3	13	8	8	0.094 NS
	28-37	3	4	0	3	1	0	0	3	0	2	
	38-47	2	3	1	1	0	0	0	1	0	2	
Education level	Illiterate	7	6	2	4	4	0	1	5	4	4	0.534 NS
	Able to read and write	4	7	1	4	4	3	1	5	3	3	
	Graduated from primary school	5	5	2	4	1	0	0	3	1	2	
	Graduated from intermediate or secondary	3	3	2	2	1	0	1	3	0	1	
	Graduated from higher education	1	2	1	1	0	0	0	1	0	2	
Marital status	Single	2	2	1	0	2	0	0	2	1	2	0.245 NS
	Married	12	13	5	11	5	2	3	10	6	6	
	Separated	2	2	0	2	1	1	0	0	0	1	
	Divorced	1	2	1	0	0	0	0	1	1	2	
	Widowed	3	4	1	2	2	0	0	4	0	1	
Previous Occupational status	Paid work	1	2	1	1	0	0	0	1	0	2	0.884 NS
	Self-employed	0	0	0	0	0	0	0	0	0	0	
	Non-paid work	0	0	0	0	0	0	0	0	0	0	
	Student	4	5	2	3	2	1	1	4	2	2	
	House wife	15	16	5	11	8	2	2	12	6	8	
	Retired	0	0	0	0	0	0	0	0	0	0	
Residential area	Urban	16	19	7	13	7	3	3	14	6	9	0.177 NS
	Rural	4	4	1	2	3	0	0	3	2	3	

NS = Non-significant relationship

**Table (5):** Association between types of crime and types of personality disorders (n=26).

Types of crime Personality Disorders	Murder	Terror	Theft	Prostitution	Forgery	Infidelity	P-Value Significance of Kendall's test & Dec.
	F	F	F	F	F	F	
Paranoid	6	1	5	4	1	3	0.616 NS
Schizoid	7	2	5	5	1	3	1.000 NS
Schizotypal	3	1	0	2	0	2	0.886 NS
Antisocial	3	2	3	4	1	2	0.285 NS
Borderline	4	0	2	3	0	1	0.704 NS
Histrionic	1	1	0	1	0	0	0.509 NS
Narcissistic	0	3	0	0	0	1	0.901 NS
Avoidant	5	2	6	1	1	2	0.305 NS
Dependent	2	1	3	1	0	1	0.731 NS
Obsessive	1	2	3	3	1	2	0.085 NS

NS = Non-significant relationship

### **Discussion:**

Socio-demographic characteristics of female sentenced prisoners. Regarding the age group, most of the study sample was in the age group 18–27 years old. The young adult age groups are more prone to do the crime because of more power, unable to control them; it's a first start point for taking a responsibility. The present finding of this study agree with the study which was done in England and Wales by Coid et al. which showed that most of the study sample was in the age group between 16-34 years (Coid et al., 2009). With regards of the levels of education, one-third of the study sample was illiterate. In the last three decades in the culture of this study sample, females have less chance to go to the school and

became educated person. The study results supported by the study which was done by Coid et al. under the title prevalence and correlates of personality disorder in Great Britain, showed that one-third of the study sample has no qualification (Coid et al., 2006). (This comparison is not correct because having no qualification in Britain does not mean illiterate, it is compulsory to go to school).

The study result showed that half of the study sample was married. This result is similar to the study which was done in Islamic Republic of Iran in by Assadi et al which showed that half of study sample was married (Assadi et al., 2006). The finding of the study showed that most of



the study sample about the occupation before arrest was housewife (unemployed), because the entire study sample was female. This result supported by Marzano et al. in England and Wales, which showed that most of the study sample was unemployed (Marzano et al., 2010). Regarding the residential area, the highest percentage of the study sample was from urban areas. The urban areas are more crowded with the complex life activities. The findings of this study agree with study that was done in Great Britain in 2006, which showed that the highest percentage of the study sample from urban area (Coid et al., 2006).

Crime characteristics of female sentenced prisoners. Regarding the murder crime, in this study one-third of the study sample did this crime type, and this result agreed with Warren et al. which showed that one-third of the study sample did murder crime, but the results of the other crimes disagreed with the Warren et al. study results. The disagreement in the results related to mostly the different cultures and religions between these two samples (Warren et al., 2002). Regarding the previous sentence and times; most of the study sample had no previous sentence, this result agreed with the study done by Assadi; in 2006 in Iran which found that most of study sample had no previous sentences (Assadi et al., 2006).

Prevalence of personality disorders among female sentenced prisoners. The findings of this study showed that the highest percentage of the study sample has schizoid personality disorder. The present study result agreed with the study done by Roberts and Coid which found that schizoid personality disorder was a greater number of violent crimes (Roberts and Coid, 2010). This result supported by study Banerjee et al. in 2009 which showed that schizoid personality disorder being the most common among the study sample (Banerjee et al., 2009). The lowest

percentage of the study sample was histrionic personality disorder. This finding was supported by the study which was done by Warren et al. on 802 female prisoners which showed that histrionic personality disorder was the lowest percentage between the study sample (Warren et al., 2002).

Association between socio-demographic characteristics and all types of personality disorders. The relationships with all types were non-significant. For the age group; the results of this study disagree with the study done by Roberts and Coid, were they found that there was significant relationship between age of female imprisonment and all types of personality disorders (Roberts and Coid, 2010). Unfortunately, the researcher did not find any specific study results to be supported or disagreed with the present study results regarding the association between types of personality disorders and the level of education, marital status, and occupation before arrest. For the residential area; supported by the study which was done by Coid et al. which showed a non-significant relationship between residential area with the types of personality disorder (Coid et al., 2006).

Association between types of crime and types of personality disorders. The results of this study show that there were non-significant relationship between types of crime and all types of personality disorders. The results of this study relatively agreed with the study which was done in Wales and England showed that less is known about the relationship between criminal behavior and the personality disorders (Roberts and Coid, 2010). This result were disagreed by the study which was done by Warren et al. in 2002, which highlighted that the personality disorders were relevant in the criminal and violent acts among incarcerated women. That may be related to the less number of the sample in this

study or difference in culture between the settings of this study and that study (Warren et al., 2002).

### **Conclusion:**

This study showed that most of the study sample was young adult, illiterate, married, house wife and from urban area. Most of the participants committed theft and murder crime with group circumstance of no previous sentence. The highest prevalence of personality disorders among the study sample was schizoid personality disorder. Moreover, there were non-significant relationships between socio-demographic characteristics and types of crime of the study sample with all types of personality disorders. The study concluded that the prevalence of all types of personality disorders was started from (11.5%) to (88.5%). The personality disorders, specially a schizoid and paranoid type have high effect on criminal behavior in the researcher's region.

### **Recommendations:**

The Ministry of Health and Ministry of Education should educate people about symptoms, prevention, and treatment of personality disorders through public media. Involving psychiatric services in female sentenced prisoners. All female prisoners are in need for increasing their awareness to the effect mental status on behaviour, through special education courses pertaining to psychiatric illnesses specifically personality disorders.

### **Reference:**

[1]. American Psychiatric Association (APA). (1994). Personality Disorders-fact sheet DSM-IV. USA. [Internet]. American Psychiatric Association (APA). (2013). Personality Disorders-fact sheet DSM-V. USA. [Internet].  
[2]. Andersen H. (2004). Mental health in prison populations. A review-with special emphasis on a study of Danish prisoners on

remand. *Acta Psychiatrica Scandinavica* 2004(424). [Internet].

[3]. Arroyo J, Ortega E. (2009). Personality disorders amongst inmates as a distorting factor in the prison social climate. *Rev Esp Sanid Penit.* 11(1).

[4]. Assadi, S. M., Noroozian, M., Pakravannejad, M., Yahazadeh, O., Aghayan, S., Shariat, S. V. & Fazel, S. (2006). Psychiatric morbidity among sentenced prisoners: prevalence study in Iran. *Br J Psychiatry*, 188, 159-64.

[5]. Banerjee, P. J. M., Gibbon, S. & Huband, N. (2009). Assessment of personality disorder. *Advances in Psychiatric Treatment*, 15, 389-397.

[6]. Coid, J., Yang, M., Tyrer, P., Roberts, A. & Ullrich, S. (2006). Prevalence and correlates of personality disorder in Great Britain. *Br J Psychiatry*, 188, 423-31.

[7]. Coid, J., Yang, M., Ullrich, S., Roberts, A., Moran, P., Bebbington, P., Brugha, T., Jenkins, R., Farrell, M., Lewis, G., Singleton, N. & Hare, R. (2009). Psychopathy among prisoners in England and Wales. *Int J Law Psychiatry*, 32, 134-41.

[8]. Gunderson, JG., Stout, RL., McGlashan, TH., Shea, MT., Morey, LC., Grilo, CM., et al. (2011). Ten-year course of borderline personality disorder: Psychopathology and Function from the Collaborative Longitudinal Personality Study. *Archives of General Psychiatry*. 68 (8). [Internet].

[9]. Hardt, J., and Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood experiences: review of the evidence. *Journal of Child Psychology and Psychiatry*, 45(2), P.260-273. [Internet].

[10]. Hutchinson V, Keller K, Reid T, Martin M (2009). Inmate behavior management: the key to a safe and secure jail. Washington, D.C. : USA Dept. of Justice, National Institute of Corrections. [Internet].

[11]. Lahit, M. (2012). Early Life Origins of Severe Personality Disorders. Ph.D. Dissertation. University of Helsinki, Institute of Behavioural Sciences, Finland. [Internet].



- [12]. Maranon, I., Echeburúa, E., and Grijalvo, J., (2004). Prevalence of Personality Disorders in Patients with Eating Disorders. *Eur. Eat. Disorders Rev.*
- [13]. Marzano, L., Fazel, S., Rivlin, A. & Hawton, K. (2010). Psychiatric disorders in women prisoners who have engaged in near-lethal self-harm: case-control study. *Br J Psychiatry*, 197, 219-26.
- [14]. Math, S., Murthy, P., Parthasarthy, R., Kumar, C., and Madhusudhan, S., (2011). Personality Disorders with Serious Implications in Prisons. *Mental Health Care in Prisons*. National Institute of Mental Health Neuro Sciences, Bangalore.
- [15]. Nee, C. and Farman, S. (2005). Female Prisoners with Borderline Personality Disorder: Some Promising Treatment Developments. *Crim Behav Ment Health*. 15 (1).
- [16]. Nickel, MK., Muehlbacher, M., Nickel, C., Kettler, C., PedrosaGill, F., Bachler, E., et al. (2006). Aripiprazole in the treatment of patients with borderline personality disorder: a double-blind, placebo-controlled study. *Am J Psychiatry*, 163(5).
- [17]. Pande, AC, Filtner, DE, Jefferson, GW, Davidson, JR, Pollack, M, Stien MB, et al. (2004). Efficacy of the novel anxiolytic pregabalin in social anxiety disorder. *Journal of Clinical Psychopharmacology* 24;141-149.
- [18]. Pridmore S., (2014). Download of Psychiatry. University of Tasmania. Discipline of Psychiatry. Tasmania.
- [19]. Ripoll. LH., (2013). Psychopharmacologic treatment of borderline personality disorders. *Dialogues Clin Neurosci*. 15 (2).
- [20]. Roberts, A. D. L. & Coid, J. W. (2010). Personality disorder and offending behaviour: findings from the national survey of male prisoners in England and Wales. *Journal of Forensic Psychiatry & Psychology*, 21, 221-237.
- [21]. Sainsbury Centre for Mental Health, (2013). Personality Disorder-A briefing for people working in the criminal justice system. Borough, London.
- [22]. Smith, A. M., (2010). Assessing Personality Disorders Using the MMPI-2-RF. MSc thesis. Kent State University. USA.
- [23]. Sollberger D, Gremaud-Heitz D, Riemenschneider A, Agarwalla P, Benecke C, Schwald O et al. (2014). Change in identity diffusion and psychopathology in a specialized inpatient treatment for borderline personality disorder. *Clinical Psychology and Psychotherapy*. 2014 (21).
- [24]. Torgersen S, Kringlen E, Cramer V. (2001). The prevalence of personality disorders in a community sample. *Arch Gen Psychiatry*. 58(6).
- [25]. Townsend, MC., (2005). Psychiatric Mental Health Nursing- concepts of care. 5<sup>th</sup> ed. Philadelphia: F.A Davis Company. USA. P.p. 730-46.
- [26]. Townsend, MC., Mary D. and Aprn, B. (2008). Essentials of Psychiatric Mental Health Nursing. 4<sup>th</sup> ed. Philadelphia. F.A. Davis Company. USA. P. 496.
- [27]. Townsend, MC., Mary D. and Aprn, B. (2013). Essentials of Psychiatric Mental Health Nursing. 6<sup>th</sup> ed. Philadelphia. F.A. Davis Company. USA. P. 602.
- [28]. Warren, J. I., Burnette, M., South, S. C., Chauhan, P., Bale, R. & Friend, R. (2002). Personality disorders and violence among female prison inmates. *J Am Acad Psychiatry Law*, 30, 502-9.