





Original Article

Comparison of depression, anxiety, general mental health and selfesteem among prisoners in consultancy and ordinary wings

Morteza Modarres Gharavi¹; Hossein Kashani²; Mojgan Lotfi³; Mahdieh Borhani⁴; Farzad Akbarzadeh⁵*

Abstract

Introduction: The prison environment is a potential major stressful factor in formation or aggravation of mental problems so this study aimed to evaluate the mental health indexes among prisoners in consultancy and ordinary wings of Central Mashhad Jail.

Materials and Methods: All of the prisoners in the ordinary and counseling wings of Mashhad Jail in 2012 comprise the statistical community of this descriptive study. 300 prisoners (equally number among prisoners who jail in ordinary and counseling wings) selected randomly. Research instruments include: Beck Depression Inventory-II, Beck Anxiety Inventory, General Health Questionnaire, Coopersmith Self-esteem Inventory and Personal Characteristics Form. Data analyzed by descriptive and analytical statistic indexes (comparison of independent means, variants analysis and regression analysis) and SPSS software.

Results: The anxiety and depression levels are lower among counseling group significantly (P<0.001) and this group had higher levels of general mental health and self-esteem (P<0.001). Self-esteem was the only variable that had a positive relation with the type of crime. Inmates charged with theft and disorderly conduct had a higher level of self-esteem than

Conclusion: According to the findings of the present study, it seems that the counseling interventions in jails can improve the mental health indexes such as depression, anxiety, general mental health and self-esteem among prisoners.

Keywords: Anxiety, Depression, Mental health, Prisoner, Self-esteem

Please cite this paper as:

Modarrres Gharavi M, Kashani H, Lotfi M, Borhani M, Akbarzadeh F. Comparison of depression, anxiety, general mental health and self-esteem among prisoners in consultancy and ordinary wings. Journal of Fundamentals of Mental Health 2015; 17(1): 52-7.

Introduction

Communities have a negative attitude to the prison and prisoners, therefore, these topics are usually neglected by psychological researchers (1). On the otherwise the prison environment is a potential major stressful factor in formation or aggravation of mental problems (2). The high-risk behavioral models such as hostility or anger are known as outcomes of prison environment that their prevalence is higher among

Corresponding Author: Psychiatry and Behavioral Sciences Research Center, Ibn-e-Sina hospital, Amel Blvd., Mashhad, Iran akbarzadehf@mums.ac.ir

Received: Apr. 21, 2014 Accepted: Sep. 23, 2014

prisoners compare to normal population (3-5). Different studies demonstrated that the prevalence of mental disorders increases in prisons dramatically (6-

Based on the results of a study conducted in England, more than 34% of 149 prisoners affected with mild, moderate and severe mental disorders so symptoms of depression and anxiety states were seen in 50% and 30% of these cases. Also, substance and alcohol abuse and neurosis were seen in some cases of these prisoners (12).

A study in USA presented that 20% of American prisoners had major psychiatric disorders (13). According to the results of another study, 50% of

Assistant professor of clinical psychology, Psychiatry and Behavioral Sciences Research Center, Mashhad University of Medical

²M.Sc. in clinical psychology, Consultancy Unit of Mashhad Jail

³M.Sc. in clinical psychology, Mashhad, Iran

⁴General physician, Psychiatry and Behavioral Sciences Research Center, Mashhad University of Medical Sciences, Iran

⁵Assistant professor of psychiatry, Psychiatry and Behavioral Sciences Research Center, Mashhad University of Medical Sciences,

referred prisoners to psychiatric services had at least one major psychiatric disorder that about 1/4 of these prisoners suffered from bipolar disorder or schizophrenia (14).

Also it has demonstrated that limitation of prisoners' referral system to psychiatric services caused to 12-fold increase of suicide rates (15). Some studies presented that there is a direct relationship between mental disorders and criminal behavior (16). This issue about punishment or treatment of prisoners has been challenged (17).

Based on the results of Mohammadi et al. study among Iranian prisoners, 86.5% of prisoners were suspected to be psychiatric patients (18).

Another epidemiologic study among prisoners of Central Jail of Shiraz showed that 33.3% of them had personality disorders that most prevalent types of these disorders were antisocial (18.55%), paranoid (10.48%) and borderline personality disorders (3.23%) (19).

Also, the same results presented in study among men prisoners in Jail of Shahrekord that the most prevalent personality disorders were antisocial (18.3%), schizoid (8.4%), dependent (8.4%) and personality borderline disorder (7.4%)respectively. Based on the type of crime, most personality disorders were seen respectively among these groups: rubbers (64.1%), substance abusers (60.9%), plug-uglies and murderers (55.6%), drug dealers (55%) and economic criminals (11.4%). In this research, the dependent and borderline personality disorders were seen 15.2% and 13% among substance abusers. The paranoid personality disorder was reported more in murderers and plug-uglies with the prevalence rate of 8.3% (20).

At the otherwise, most of prisoners do their past misdeeds after freedom so they are returned to jails. The researches demonstrated that these prisoners with psychiatric problems were not treated well or not treated at all in their prison duration and the prison had no positive effect on their situations (12,19-25). So, according to the results of different studies, the present situations of the prisons have no social and personal benefits and in most cases they have adverse outcomes (2,19,20,25).

The idea of reform and rehabilitation of prisoners' personality structures and personalsocial behaviors is a most serious concern of community agencies particularly judicial authorities (26). The reform project of prisoners' residency in Mashhad jails formed about one decade before. This project designed with counseling-therapy

program based on humanistic approach and doctrine of unity. This method founded by Jalali-Tehrani and it progressed to other jails of Iran. At present, especial parts formed in jails as parts of counseling and psychological interventions.

The integration therapy aims to reveal the theme of life, global perception of mean of life and find a central motivation. The unit-therapy accepts this humanistic psychological principle that presents the human has a positive inner core. Also it accepts the Islamic belief that this core is brain. The aim of this treatment is promoting and awakening of brain. The main instrument for change is relation-therapy and the key of this therapy is treatment approach based on believe, respect and acceptance. Practitioner gets close to patients through therapeutic relationship, therapeutic presence, empathy and deep personal interest (27). Other characteristics of counseling wings include the potentiality of prisoners' dates with their first degree relations and residency with them for part of day in an appropriate location, potentiality of group sports and singing poems for prisoners' children and their family.

In addition, the family memberships have been encouraged to involve with education-treatment programs in weekly dates to help the prisoners' integration with their family and community as soon as possible. This environment caused the prisoners accepted themselves through change their attitude more than before. Therefore, the present study aimed to evaluate the efficacy of counseling interventions based on different indexes of mental health after about one decade from their foundation in jails.

Materials and Methods

All of the prisoners in the ordinary and counseling wings of Mashhad Jail in 2012 comprise the statistical community of this research. After preparing the prisoners list, number of 300 prisoners (equally number among prisoners who jail in ordinary and counseling wings) selected randomly. **Experienced** practitioners communicated with the mentioned participants then the prisoners fulfilled the questionnaires of this research. Finally, the data collected from 300 participants questionnaires analyzed through descriptive and analytical statistic indexes (comparison of independent means, variants analysis and regression analysis). Research Instruments

a) Beck Depression Inventory-II (BDI-II): This inventory (28) is a revised form of Beck

Depression Inventory that formed for evaluation of severity of depression (29). This revised version is more concordant with DSM-IV compare to first version. This inventory like first version consists of 21 items that every item has four responses (every item: 0-3 scores, global score: 0-63). The participant selects one of them according the severity of depression. The cut point not indicated in introduction of BDI-II. The cronbach's alpha and internal consistency of this inventory were calculated among American population (α=0.86, 0.92 respectively) (28). Also these amounts calculated among Iranian population (α =0.86, 0.92 respectively) (30).

- b) Beck Anxiety Inventory (BAI): This inventory is a 21-items scale that prepared to evaluation of severity and symptoms of anxiety. These items scored in range of 0-3, so global score of the inventory is: 0-7 mild anxiety, 8-15 mild anxiety, 16-25 moderate anxiety, 26-63 severe anxiety respectively. The cut point not indicated in introduction of BAI for absence of anxiety. The cronbach's alpha and consistency of this inventory were calculated in Iranian population (α =0.92, 0.91 respectively) (30).
- c) General Health Questionnaire (GHQ): This 28-item questionnaire designed to evaluate the

quality of life and general mental health. Its aim is not the special diagnosis and it designed for all community populations. It consists of 4 subscales include: physical symptoms, anxiety, social function impairment and depression. The minimum and maximum scores of this questionnaire are 0 and 84 respectively.

Based on the results of Ebrahimi et al. study, the validity and cronbach's alpha of this scale calculated 0.78 and 0.98 respectively among Iranian population (31).

- d) Coopersmith Self-esteem Inventory: This self-report inventory used for evaluate the self-esteem of participants. It consists of 58 questions which responded as No/Yes. The past studies demonstrated that validity of this inventory is acceptable (32) and its cronbach's alpha=0.87 estimated among Iranian population (33).
- e) Personal Characteristics Form: This form includes: name, surname, age, marriage status, type of crime, duration of conviction, withstand punishment and duration of residency in counseling wing.

Results

The prisoners' demographic characteristics were presented in tables 1 and 2.

Table 1: The prisoners' demographic characteristics

Wing of prison	Age (year)	Job	Marriage	Mean times of conviction (0-12)	Duration of conviction (month)	Withstand punishment
Consultancy	35.5	Jobless 5	Single 54	1.39	436.03	51
		Private job 126	Married 95			
		Employee 7				
Ordinary	34.1	Jobless 8	Single 36	2.26	285.62	26.93
		Private job 126	Married 91	w V hah		
		Employee6	وم الساتي وم	رو بسکاه علم		

Table 2: Kind of crimes among prisoners in consultancy and ordinary wings

Type of crime	Consultancy	Ordinary	
	Prevalence	Prevalence	
	(percentage)	(percentage)	
Financial criminal	28 (18.7)	4 (2.7)	
Thief	38 (24.7)	40 (26.7)	
Substance related crimes	57 (38)	38 (25.3)	
Murderer	5 (3.3)	22 (14.7)	
Plug-ugly	19 (12.7)	23 (15.3)	
Sexual crime	4 (2.7)	3 (2)	

The most prevalent of types of crime among prisoners in consultancy wing, were substance related crimes, theft and financial crimes respectively but most prevalent crimes among prisoners in ordinary part were theft, substance related crimes and ugliness respectively. Also the prevalence of kill among these prisoners had a

considerable percentage (about 14%) but the prevalence rates of kill and ugliness among prisoners in consultancy wings were low. The results derivated from comparison of different indexes of mental health include depression, anxiety, self esteem and general mental health among prisoners are presented in table 3.

Based on the results, the mean scores of depression and anxiety reported lower significantly among consultancy wings compare to ordinary parts and the other hand the mean scores of self-esteem and general mental health were higher among prisoners in consultancy wings significantly (P=0.001).

The relation between self-esteem and type of crime was significant (P<0.001). It means that rubber and plug-uglies prisoners have higher

mean score of self-esteem. Also this relation between consultancy and ordinary wings is

different and among ordinary prisoners is stronger.

Table 3: Comparison of different indexes of mental health include depression, anxiety, self esteem and general mental health among prisoners

Benefat mental nearth among prisoners									
Mental health indexes	Groups	Mean	Standard deviation	F	P				
Depression	Consultancy	16.31	8.42	20.41	0.001				
•	Ordinary	20.47	12.21						
Anxiety	Consultancy	11.65	9.57	21.23	0.001				
-	Ordinary	18.25	12.80						
Self-esteem	Consultancy	34.38	8.14	0.84	0.001				
	Ordinary	31.16	8.75						
General mental health	Consultancy	16.71	12.36	11.91	0.001				
	Ordinary	24.21	15.17						

The relations between anxiety and general mental health with of type of crime were not significant.

The relations of duration of conviction and withstand punishment with mental health indexes (depression, anxiety, self-esteem and general mental health) were assessed.

The relation between duration of conviction and depression, self-esteem, anxiety and general mental health among consultancy group were not significant (r=0.02, r=0.01, r=0.04 respectively, P=0.156).

The relation between withstand punishment and depression was significant but in other indexes were not seen any significant relations (P > 0.05).

The relations between duration of residency in consultancy parts (month) and mental health indexes were not significant (depression, anxiety, self-esteem and general mental health) (r=0.05, r=0.02, r=0.10, r=0.04 respectively, P>0.05).

Discussion

This research aimed to compare the level of mental health among prisoners in counseling and ordinary wing of Mashhad Correctional Facility. Based on the results, the mean scores of depression and anxiety among counseling group were lower significantly and the mean scores of self-esteem and general mental health were higher significantly. These findings are concordant with previous studies (34-36).

A pilot research of interpersonal group-therapy on 26 women prisoners with depression and substance abuse demonstrated that 72% of participants had no symptoms of depression at the end of intervention (36). Many studies have shown that prison environment is very intolerable and disturbing for prisoners, especially prisoners with mental disorders (37,38).

Different factors can explain these results. The low prevalence rate of depression in counseling

wings may be due to the counseling intervention and treatment process. One of the aspects of jail reformation project that started in the 90's is remediation of the physical environment of jails such as hygiene, welfare equipments and similarity of jail to real and ordinary environment. This could be a factor in improving the morale and prevention of depression among prisoners.

On the other hand, no relation has been found between duration of conviction and depression, because residency in jails regardless of duration can affect depression.

The results indicated that the anxiety level is lower among counseling group significantly. The counseling interventions can explain this finding. Based on the results of a study on assessment of art-therapy effects among men and women prisoners, this intervention can improve the mood, behavior and problem solving abilities (34). These changes can reduce the anxiety and improve general mental health.

These results indicate that emotional anxiety is more state dependent and it changes more than depression. Also another study indicates that young adults and adolescents apply emotional coping strategies. These strategies can lead to physical disorders, anxiety, insomnia, severe depression and social dysfunction (39).

Another index was self-esteem. The assessment of this index was especially important, because it assumed that one of the most major aspects that affects and changes through psychotherapeutic interventions, especially humanistic approaches, is self esteem. The empathic and respectful behavior towards prisoners are very important principles that act as the core of efficacy of counseling programs and go beyond techniques, approaches and programs, improving and rehabilitating the prisoners' self-esteem which is impaired because of guilt feelings (27). In addition, self-esteem was the only variable that

had a positive relation with the type of crime. Inmates charged with theft and disorderly conduct had a higher level of self-esteem than others and this relation was stronger in ordinary prisoners.

This issue is noticeable that counseling interventions led to match the prisoners in counseling wings about effectiveness of related problems of specific crimes. It means that contact with guilt feeling led to decrease of the false sense of self-esteem in counseling group but that did not happen among ordinary group but the global level of healthy self-esteem was higher among these prisoners.

This study has some limitations such as lack of cooperation among some of prisoners and limitation of statistical community to the correctional facility of one city and one gender (male).

Conclusion

According to the findings of the present study, it seems that the counseling interventions in jails can improve the mental health indexes such as depression, anxiety, general mental health and self-esteem among prisoners.

References

- 1. Holbert F, Unnithan NP. Free will, determinism, and criminality: The selfperception of prison. J Crim Justice 1990; 18(1): 43-53.
- 2. Danesh Parvar H. [Articles of first international conference on the reduction of prison sentences]. Tehran: Raahe Tarbiat; 2007. (Persian)
- 3. Bolhari J, Bayanzadeh SA, Taghizadeh R. [Substance abuse assessment in Iran prisons]. Quarterly journal of addiction research 2003; 1(3): 13-51. (Persian)
- 4. Ireland JL, Archer J. Impulsivity among adult prisoners: A confirmatory factor analysis study of the Barratt Impulsivity Scale. Pers Individ Dif 2008; 45: 286-92.
- 5. Hirsh J. Peterson JB. Extraversion, neuroticism, and the prisoner's dilemma. Pers Individ Dif 2009; 46(3): 254-6.
- 6. Ramluggun P, Lindsay B, Pfeil M. Research in prison: a researcher-practitioner's view. Nurse Res 2010; 17(3): 60-71.
- 7. Black DW, Gunter T, Loveless P, Allen J, Sieleni B. Antisocial personality disorder in incarcerated offenders: Psychiatric comorbidity and quality of life. Ann Clin Psychiatry 2010; 22(2): 113-20.
- 8. Agbahowe SA, Ohaeri JU, Ogunlesi AO, Osahon R. Prevalence of psychiatric morbidity among convicted inmates in a Nigerian prison community. East Afr Med J 1998; 75(1): 19-26.
- 9. Lamb HR, Weinberger LE. Persons with severe mental illness in jails and prisons: A review. Psychiatr Serv 1998; 49(4): 483-92.
- 10. Fasher AM, Dunbar N, Rothenbury BA, Bebb DK, Young SJ. The health of a group of young Australians in a New South Wales juvenile justice detention centre: A pilot study, J Paediatr Child Health 1997; 33(5): 426-9.
- 11. Jemelka R, Trupin E, Chiles JA. The mentally ill in prisons: A review. Hosp Community Psychiatry 1989; 40(5): 481-91.
- 12. Gune J. Psychiatric aspects of prisoners with psychiatric disorder. Br Med J 1978; 303: 338-41.
- 13. Roth LH, Ervin FR. Psychiatric care of federal prisoners. Am J Psychiatry 1971; 128(4): 424-30.
- 14. Petrich J. Psychiatric treatment in jail: An experiment in health-care delivery. Hosp Community Psychiatry 1976; 27(6): 413-5.
- 15. Skegg K, Cox B. Impact of psychiatric services on prison suicide. Lancet 1991; 338(8780): 1436-8.
- 16. Anderson M. Mental illness and criminal behaviour: A literature review. J Psychiatr Ment Health Nurs 1997; 4(4): 243-50.
- 17. Melamed Y. Mentally ill persons who commit crimes: punishment or treatment? J Am Acad Psychiatry Law 2010; 38(1): 100-3.
- 18. Mohammadi A. [The impact of prison on mental health]. Correction and rehabilitation journal 2008; 7(81): 41-8. (Persian)
- 19. Ashkani H. [Epidemiology of mental disorders in Adel Abad male prisoners in Shiraz]. Iraninan psychiatry and clinical psychology 2002; 2(30): 4-10. (Persian)
- 20. Palahang H, Vakilzadeh SB, Daris F. [Frequency of personality disorders in prisoners male in Shahrekord prison]. Iraninan psychiatry and clinical psychology 2003; 8(3): 57-65. (Persian)
- 21. Zoccali R, Muscatello MR, Bruno A, Cambria R, Cavallaro L, D'Amico G, et al. Mental disorders and request for psychiatric intervention in an Italian local jail. Int J Law Psychiatry 2008; 31(5): 447-50.
- 22. Blaauw E, Roesch R, Kerkhof A. Mental disorders in European prison systems. Arrangements for mentally disordered prisoners in the prison systems of 13 European countries. Int J Law Psychiatry 2000; 23(5-6): 649-63.
- 23. Teplin LA. Psychiatric and substance abuse disorders among male urban jail detainees. Am J Public Health 1994;
- 24. Tiihonen J, Hakola P. Psychiatric disorders and homicide recidivism. Am J Psychiatry 1994; 151(3): 436-8.

- 25. Abdolhadi B, Frooghan M, Dadkhah A, Delavar A. [Personality disorders in female prisoners in Tehran and Karaj]. Social welfare quarterly 2004; 3(12): 301-9. (Persian)
- 26. Shams A, Bolhari J. [Psychological training for prisoners]. Tehran: Raahe Tarbiat; 2006. (Persian)
- 27. Jalali-Tehrani SMM. Integration therapy. In: Corsini R. (editor). Handbook of innovative therapy. 2nd ed. New York: John Wiley; 2001: 321-31.
- 28. Beck AT. Manual for the Beck Depression Inventory-II. San Antonio: Psychological corporation; 1996.
- 29. Beck AT, Epstein N, Brown G, Steer RA. An inventory for measuring clinical anxiety: Psychometric properties. J Consult Clin Psychol 1988; 56(6): 893-7.
- 30. Fata L, Birashk B, Atef Vahid MK, Stephen Dobson K. [Meaning structures/schemas, states of emotional and cognitive processing of emotional information: Comparison of two conceptual frameworks]. Iraninan psychiatry and clinical psychology 2005; 11(3): 312-27. (Persian)
- 31. Ebrahimi A, Molavi H, Mousavi GH, Borna Manesh AR, Yaghoubi M. [Psychometric properties, factor structure, clinical cut-off point, sensitivity and specificity of 28 item general health questionnaire (GHO-28) in Iranian patients with psychiatric disorders]. Journal of research in behavioural sciences 2007; 5(1): 5-12. (Persian)
- 32. Johnson BW. The Coopersmith self-Esteem inventory: A construct validation study. Educ Psychol Meas 1983; 43(3): 907-13.
- 33. Olyaii N, Afshar Moghadam F, Birashk B, Lavi Majd H. [Effects of personal growth group on self-esteem of nursing students in Shaheed Beheshti Faculty of Nursing and Midwifery in Tehran]. Journal of nursing and midwifery, Shahid Beheshti 2005; 15(2): 3-11. (Persian)
- 34. Gussak D. The effects of art therapy on male and female inmates: Advancing the research base. The arts in psychotherapy 2009; 36(1): 5-12.
- 35. Gussak D. The effectiveness of art therapy in reducing depression in prison populations. Int J Offender Ther Comp Criminol 2007; 51(4): 444-60.
- 36. Johnson JE, Zlotnick C. A pilot study of group interpersonal psychotherapy for depression in substance-abusing female prisoners. J Subst Abuse Treat 2008; 34(4): 371-7.
- 37. Blitz CL, Wolff N, Shi J. Physical victimization in prison: The role of mental illness. Int J Law Psychiatry 2008; 31(5): 385-93.
- 38. Gussak D. The effects of art therapy with prison inmates: A follow-up study. The arts in psychotherapy 2006; 33(3): 188-98.
- 39. Ireland JL, Boustead R, Ireland CA. Coping style and psychological health among adolescent prisoners: A study of young and juvenile offenders. J Adolesc 2005; 28(3): 411-23.

