

Prevalence and Comparison of Mental Disorders among Administrative Staff and Warders of the Central Prison of Sistan and Baluchestan

Mahmoud Shirazi

Department of Psychology, Faculty of Education and Psychology, University of Sistan and Baluchestan, Zahedan, Iran.

ABSTRACT

Purpose: To examine and compare the prevalence of different types of mental disorders among the administrative staff and warders of the central prison of Sistan and Baluchestan.

Materials and Methods: The study population included all employees of Zahedan general office of prisons. The sample consisted of 100 employees, of whom fifty individuals worked in various administrative units of Zahedan general office of prisons and fifty were warders and selected randomly. Goldberg's General Health Questionnaire was used for data collection. Data was analyzed using multivariate analysis of variance.

Results: The results indicated no statistically significant difference in mental health components between the two groups of administrative staff and ward staff ($P = .05$). However, there was a statistically significant difference between women and men, considering the mental health components ($P = .01$), thus, women working in the prison were suspected of having somatic symptoms, while men working in the prison were suspected of having social dysfunction symptoms. However, the difference between the two groups of men and women was not significant with regard to anxiety symptoms and depression symptoms ($P = .05$).

Conclusion: It seems certain that preserving mental health is as important as physical health. Therefore, given the prison staff's occupational sensitivity, necessary interventions could be exerted through formulating such plans as methods for coping with stress. This can help promoting their general health, while carrying out necessary assessment of staff's mental health is also important in order to manage and control potential problems.

Keywords: clinical competence; medical staff; hospital; developmental disabilities; psychology; longitudinal studies; epidemiology; mental disorders; predictive value of tests; risk factors.

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INTRODUCTION

A certain percentage of the world's working population has mental health-related problems⁽¹⁾ and the estimated societal and economic costs of mental illness and psychological injury in the workplace is staggering.⁽²⁾ Workplace environment, indeed, is a setting with all social indices of psychiatry that should be performed within it. The healthier the environment regarding these indices, the better the business is performed.⁽³⁾ The concept of mental health, which has been recognized

as a public health priority for nearly a century, is indeed an aspect of the concept of general health.⁽⁴⁾ Meanwhile, military forces, compared to other people and occupations, are more prone to mental health threats since workplace environment has always been affecting the individual.⁽⁵⁾ In other words, job characteristics and mental characteristics are permanently involved in a mutual and dynamic relationship.⁽⁶⁾ According to a research study, Angermeyer and colleagues found that depression, anxiety and fatigue in nurses exposed to

stress and mental issues can be considered as common problems among this group.⁽⁷⁾ Smith believes that nurses experience high occupational stress and pressure that can affect their disposition and provide depression.⁽⁸⁾ Lee and colleagues, under the support of the Medical Community of Taiwan, investigated the relationship between mental health and job satisfaction in a pharmaceutical laboratory in a medical center in February 2009 and indicated a significant relationship between mental health and job satisfaction. In this article, using self-report questionnaires, implementation of mental health promotion programs in various organizations is recommended.⁽⁹⁾ Studies show that among the 130 jobs under examination, nursing ranked 27th in terms of being referred to a doctor for mental health problems.⁽¹⁰⁾ It is clear that the individual's environmental stressors can affect him or her. Employed individuals spend much of their time in the work environment. Regardless of exceptions, a large number of prisoners suffer from some mental illnesses, have little education and different developmental defects that double the difficulty of guarding them. Hard work and stress on warders can endanger their mental health; therefore, on the basis of the above statements and considering job stress, shift work, job satisfaction, and issues like that, the present study seeks to answer the following questions:

1. How prevalent are mental disorders among prison warders and administrative staff?
2. Is there any statistically significant difference in mental health components (somatic symptoms, anxiety symptoms, social dysfunction symptoms, and depression symptoms) between prison warders and administrative staff of the prison?
3. Is there any statistically significant difference in mental health components (somatic symptoms, anxiety symptoms, social dysfunction symptoms, and depression symptoms) between male and female prison staff?

MATERIALS AND METHODS

The present study was descriptive and its population included all employees of the central prison of Zahedan. The employees included the staff unit, administrative, guards of the general office and warders. In other words, the population included two groups including warders and staff who worked in various departments and units of Zahedan general office of prisons rather than inside the wards. The sample consisted of 100 staff, fifty of whom worked in various administrative units of Zahedan general office of prisons; the other fifty warders were

selected through applying simple random sampling method. In selection process, names of the warders and the administrative staff were prepared in advanced, then fifty warders along with fifty administrative staff were selected randomly and the data was collected.

Data Collection Instrument

Goldberg's General Health Questionnaire: This questionnaire was developed by Goldberg in order to detect mental disorders rather than Psychosis.⁽¹¹⁾ In this study, the General Health Questionnaire-28 (GHQ-28), which was developed by Goldberg and Hillier, was used. This questionnaire included four sub-scales as follow: 1. Somatic symptoms, 2. Anxiety and sleep disorders, 3. Social dysfunction symptoms, and 4. Depression symptoms. Each subscale contained seven items in a multiple choice format. In all options, the lower degrees indicate health and higher degrees indicate the absence of health or presence of some kind of discomfort in the person. To score this questionnaire, the Likert type scale (0, 1, 2, and 3) is used. Using Cronbach's alpha coefficient and test-retest method, the reliability of the General Health Questionnaire-28, which is normally used in general population to detect minor disorders, was respectively obtained 0.82 and 0.86.⁽¹¹⁾ In a study carried out on 223 adults, Cheung and Spears calculated the reliability of the GHQ-28 through using the test-retest method (overall scale $r = .55$; somatic symptoms $r = .44$; anxiety symptoms $r = .46$ social dysfunction symptom $r = .42$ and depression symptoms $r = .47$).⁽¹⁰⁾ Based on the report of Goldberg and Hilber, the reliability of the 28-item form of the questionnaire is as satisfactory as the 60-item and 30-item ones.⁽¹¹⁾ The relationship between significant events of life and health was studied by Chen with Life Events Inventory and the GHQ on 102 students. The results showed that the correlation between life events and somatic symptoms ($r = .21$), anxiety ($r = .26$), and depression ($r = .21$) was significant. In each scale, there are seven items, each of which contains four options. Two scoring procedure can be applied on the questionnaire. Based on one, options A and B are scored 0, while options C and D receive a score of 1. According to the other, a Likert-type scoring scale is applied, so that options A to D are scored from 0 to 3, respectively.⁽¹⁰⁾

RESULTS

Results of this study, in relation to the first question proposed in the introduction, indicate that the prevalence of somatic symptoms in female administrative staff and

warders is 38.9% and 42.9%, respectively; while the prevalence of somatic symptoms in male administrative staff and warders is 21.9% and 22.2%, respectively. Therefore, the highest frequency of somatic symptoms belongs to female administrative staff and warders. The prevalence of anxiety symptoms in male administrative staff and warders is 25.5% and 27.85%, respectively, while in female administrative staff and warders, it is 27.8% and 28.65%, respectively. The prevalence of social dysfunction symptoms in male administrative staff and warders is 84.6% and 77.8%, respectively, while in female administrative staff and warders, it is 55.6% and 78.6%, respectively. Therefore, the highest frequency of social dysfunction symptoms belongs to male administrative staff and warders. The prevalence of depression symptoms in male administrative staff and warders is 9.4% and 19.4%, respectively, while in female administrative staff and warders, it is 27.8% and 21.4%, respectively (Table 1).

The results of ANOVA, in relation to the second question proposed in the introduction, indicate no statistically significant difference in the mean values of the four components (somatic symptoms, anxiety symptoms, social dysfunction symptoms and depression symptoms) between the administrative staff and warders ($P = .05$) (Table 2).

The results of ANOVA, in relation to the third question proposed in the introduction, indicate a statistically

significant difference in the mean values of two components (somatic symptoms and social dysfunction symptoms) in male and female staff in a way that female staff suffer from somatic symptoms, while male staff suffer from social dysfunction ($P = .05$). However, the difference between the two groups of males and females is not significant regarding the components of anxiety symptoms and depression symptoms ($P = .05$) (Table 3).

DISCUSSION

Prisons have become homes to thousands of prisoners who suffer from mental disorders and have poor mental health conditions.⁽¹²⁾ The prevalence of mental disorders among prisoners is striking and is higher than the average of the general population, since prisoners' lifestyle in the prison wards is often disturbing and is accompanied with social exclusion, instability, and unemployment.⁽¹³⁾ Therefore, the present study aimed to examine and compare the prevalence of mental disorders among the administrative staff and warders who deal with prisoners. The results indicated that the prevalence of somatic symptoms was more among females than males and the prevalence of social dysfunction symptoms was more among males compared to females. The results also showed no difference in mental health between administrative staff and warders. These findings are consistent with the research results of Lee and colleagues⁽⁹⁾, Cheung and

Table 1. Prevalence of somatic symptoms and anxiety symptoms in prison warders and administrative staff.

Variables	Condition	Gender	Somatic Illness		Anxiety		Social Dysfunction		Depression	
			Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Administrative staff	Healthy	Male	25	78.1	24	75	5	15.6	29	90.6
		Female	11	61.1	13	72.2	8	4.44	13	72.2
	Patient	Male	7	21.9	8	25	27	84.4	3	9.4
		Female	7	38.9	5	27.8	10	55.6	5	27.8
Warders	Healthy	Male	28	77.8	26	72.2	8	22.2	29	80.6
		Female	8	57.1	10	71.4	3	21.4	11	78.6
	Patient	Male	8	22.2	10	27.8	28	77.8	7	19.4
		Female	6	42.9	4	28.6	11	78.6	3	21.4
P value	Prison administrative staff and warders		.91		.69		.49		.91	
	Male and female prison staff		.01		.44		.00		.09	

Table 2. Results of for mental health components (somatic symptoms, anxiety symptoms, social dysfunction symptoms and depression symptoms) in prison administrative staff and warders.

Variables	Administrative Staff		Warders		Sum of Squares	df	Mean Square	F	P Value
	Mean	SD	Mean	SD					
Somatic illness	7.30	4.31	7.20	4.80	0.250	1	0.250	0.012	.91
Anxiety	7.44	5.09	7.04	5.17	4.000	1	4.000	0.152	.69
Social dysfunction	12.28	3.20	12.76	3.74	5.760	1	5.760	0.474	.49
Depression	3.90	5.28	4.02	5.74	0.360	1	0.360	0.012	.91

Table 3. Results of for mental health components (somatic symptoms, anxiety symptoms, social dysfunction symptoms and depression symptoms) in male and female prison staff.

Variables	Administrative Staff		Warders		Sum of Squares	df	Mean Square	F	P Value
	Mean	SD	Mean	SD					
Somatic illness	6.48	4.24	8.87	4.79	124.26	1	124.26	6.34	.01
Anxiety	6.97	5.12	7.81	5.12	15.42	1	15.42	0.58	.44
Social dysfunction	13.17	3.51	11.12	2.98	91.57	1	91.57	8.11	.00
Depression	3.32	4.72	5.31	6.72	86.08	1	86.08	2.91	.09

Spears⁽¹⁰⁾, Smith⁽⁸⁾, and Angermeyer and colleagues.⁽⁷⁾ In addition, Cheung and colleagues found that good job function was correlated with healthy function in many areas of life.⁽¹⁰⁾ Lee and colleagues under the support of the Medical Community of Taiwan, examined the correlation between mental health and job satisfaction in a pharmaceutical laboratory in February 2009 and found a significant relationship between mental health and job satisfaction.⁽⁹⁾ Studies show that among the 130 jobs under examination, nursing ranked 27th in terms of being referred to a doctor for mental health problems.⁽¹⁰⁾

CONCLUSIONS

Mental health is among the basic needs of human that has a critical role in sustainable development. What is certain is that preserving mental health is as important as physical health. Staffs who had desirable health and hygiene and worked at a safe environment reflect higher efficiency compared to other peers. Therefore, progress in providing enough support will lead to securing healthy staff and as a result promoting health in prisons. In addition, holding workshops on methods of coping with stress can be effective in promoting mental health.

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CONFLICT OF INTEREST

None declared.

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Corresponding Author:

Shirazi Mahmoud, PhD

Department of Psychology, Faculty of Education and Psychology,
University of Sistan and Baluchestan, Zahedan, Iran.

Tel: +98 543 1136768

Fax: +98 54 3341612

E-mail: mshirazi@edpsy.usb.ac.ir

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