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## Prevalence of Depression in Duty Personnel at (A) City Police Headquarters in 2012

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#### **ABSTRACT**

Undoubtedly, today's world is the world of human beings and the custodians of organizations are people. Mental health is one of the most important indicators of health in a society. The purpose of this study is to determine rates of depression in active duty personnel at (A) city police headquarters. This descriptive, cross-sectional research project examines all duty personnel (n=70) at (A) city police headquarters. Data were collected using Beck's and Lovibond's standardized questionnaires. The 21-item Beck Depression Inventory measures the intensity of depression and the 42-item Depression Anxiety and Stress Scale (DASS-42) developed by Lovibond measures depression, stress and anxiety. Data were analyzed using descriptive and inferential statistics with the SPSS software product v20. The administration of the Beck Depression Inventory on the 70 soldiers under study yielded the following results: Without Depression (20%), Mild Depression (41.42%) Moderate Depression (37.14%), and Severe Depression (1.42%). In addition, the administration of Lovibond's Depression Anxiety and Stress Scale (DASS-42) on the population under study yielded the following results: on the Depression Scale: Natural (17.94%), Mild (44.97%), Moderate (36.10%), and Severe (1.92%); on the Anxiety Scale: Natural (27.34%), Mild (43.26%), Moderate (28.40%), and Severe (1.92%); and, on the Stress Scale: Natural (24.46%), Mild (34.82%), Moderate (39.72%), and Severe (1.92%). The results of this study and other studies conducted in this field show that in general the prevalence of mental disorders, especially depression, among adolescents and young adults in today's society is higher than normal. Thus, paying attention to this vulnerable yet vital stratum of society – not merely with an instrumental approach – in macro-level programs and policies of the country will lead to the ever-increasing development and independence of Iran. High-spirited duty forces free of mental disorders or concerns in the modern world will apply all their potentials to better serve the goals and ideals of the Islamic Republic of Iran.

## KEYWORDS: depression, anxiety, stress, duty personnel

## **INTRODUCTION**

Mental health is one of the most important indicators of health in a society. Organizations without people not only lack meaning but also will not exist in the first place to operate. The modern man is afflicted with mental disasters such as agitation, anxiety, etc. It is no wonder that the present century is called the century of anxiety. According to international statistics, 15% of adults show obvious symptoms of depression and only 5% of them go to a psychiatrist. Research shows that 19 million people experience depression each year in the United States of America (Leibenluft, 1997). It is also estimated that 10 to 20 percent of the population suffer from mild to severe depression (Lotf Abadi, 2002; Kaplan and Sadok, 1995). According to studies conducted in Iran, about 7 million people suffer from some form of mental disorder (Mohammadi, Davudian, and Noorbala 2005: 16). Depression is an emotional state that is characterized by sadness, anxiety, guilt, withdrawing from others, sleeplessness, lack of appetite, loss of libido, and loss of interest and enjoyment of ordinary activities of daily life. For these people, it is difficult to stay focused and pay attention or to understand what they read or hear from others. Many of them prefer to sit down. When faced with a problem, they cannot think of solution strategies. They pay little attention to personal healthcare and frequently complain in a hypochondriac manner of pains without physical origin. They are generally worried and sad and as a result suffer from a variety of defects in social, familial, work and educational performance (Kasobson, 1991; quoted in Farzin Radd et al., 2010). In terms of prevalence, depression ranks fourth in the world among all the diseases and disorders. It has been estimated that by the year 2020, depression will be the second leading cause of disability (Khajavi et al., 2003). Depressive disorders with a lifetime prevalence of about 10 to 25

percent in women and 5 to 12 percent in men have been labeled as the psychological influenza (Kaplan and Sadok, 2007). In the meanwhile, available statistics reflect the increasing cases of the disease. Several factors have been mentioned in the etiology of this types of disorder among which are biological factors, psychosocial factors, and heredity. Various treatment methods have been proposed in accordance with the etiology of this disorder (Oei and Dingle, 2007). Stress in military life acts as a revealing agent on the soldier. Considering individual predisposition and history and based on the definition of health (a combination of physical, mental and social health that interact with each other), stress can lead to adaptive problems and the incidence of abnormal behavior in soldiers including suicide, depression, and harming oneself and others. In other words, the inability to deal with and solve problems appropriately may lead to adaptive problems manifested in the form of emotional turmoil, increased sensitivity to external stimuli, anxiety, sadness, mood swings and depression (Florkowski et al., 2001; quoted in Haji Amini et al., 2010). Entering a military environment in the early period of youth and the fifth stage of mental development constitutes a critical period in the life of young energetic forces of any country. This period in a military organization is associated with cognitive, behavioral, organizational, cultural, ethnic and tribal changes. Therefore, being in such situations affects performance often because of stress and anxiety since a soldier must learn how to play tough, intimate and emotional roles and what positions to adopt in his obligations and relations. Facing these roles, receiving hard and steady trainings on dangerous training missions, and tolerating pressure for carrying out various obligations are other stressors in the military which can be minimized by coping styles (Bani Fatemeh and Hekmatpour, 2006). With all the possible advantages it may have, this new period in life is associated with many stressful situations, including: separation from the family, support systems, and favorite people; changes in eating habits; restrictions on freedom of choice and action, intense and imposed discipline; frequent forced displacements; change in sleeping habits; performance anxiety caused by very high expectations; problems with commanders or fellow soldiers; fear of relationship with others; and, the inability to tolerate and deal effectively with these issues (Fathi-Ashtiani and Sajjadehchi, 2005). Research and scientific observations indicate that some soldiers in the military service experience intense feelings of loneliness and injury and often do not get the chance to ask for help. The inability to successfully deal with and solve issues leads to adaptation problems and reckless reactions such as committing suicide (Fathi-Ashtiani et al., 2001). Mental health is a science or art that helps people to adapt to their environment and choose more favorable solutions for solving problems by establishing proper mental and emotional coping strategies. A special focus on health not only is effective in improving health but also provides a fertile ground for the flourishing of hidden talents. Mental health is one of the most important factors in the progress and development of mankind. Iran has a young population. Duty military personnel play an important role as the future operators of this society. As a result, identifying and solving their problems will positively affect the functioning of society. Numerous studies have been conducted in this area. However, none of them addresses a military environment. According to studies, about 20 percent of Iranian students are depressed. Therefore, paying attention to the factors involved in mental illnesses - especially depression as a motivational leprosy - that hinder progress in achieving macro-scale objectives of governments is most essential in the competition century than ever.

## MATERIALS AND METHODS

This study is conducted with a survey field design and in the form of a cross-sectional epidemiological research project. Complete enumeration (convenience sampling) was used for selecting all duty personnel (n=70) at (A) city police headquarters as participants in this study. Data collection instruments in this study included the 21-item Beck Depression Inventory and the 42-item Depression Anxiety and Stress Scale (DASS-42) - developed by Lovibond in 1955 based on the scales of Depression, Anxiety and Stress. To gather data, the researcher prepared copies of the two questionnaires with answer sheets and administered them among the participants. The respondents were reminded to answer honestly and accurately according to their current feelings and not to think too much on any item – but only to express their feelings. Since the respondents were not required to mention their names, we can rely on the accuracy of the answers with more confidence. The questionnaires included two sections: demographic data such as age, field of education, degree, place of residence, occupation of the parents, etc. and the test questionnaire that was completed by the personnel. The DASS questionnaire assesses the following items:

- 1. Depression: Depression includes low mood, loss of interest in the pleasures of life, lack of motivation and loss of vital energy, feelings of hopelessness, suicidal thoughts and other cognitive and physical aspects.
- 2. Stress: Stress refers to psychological pressures caused by everyday problems that impair a person's ability.
- 3. Anxiety: Worried or anxious people have a tendency to be afraid, scared, nervous, tense and terrified.

Validity and reliability: The three scales of Depression, Anxiety and Stress yielded Cronbach's alpha coefficients of 0.94, 0.85 and 0.87, respectively.

The Beck Depression Inventory measures degrees of depression. The maximum score on this test, which is

representative of depression, is 62. In other words, the person who scores 62 suffers from absolute depression (100%). The Beck Depression Inventory yielded a Cronbach's alpha coefficient of 0.87. There is also an 84% correlation between the Beck Depression Inventory and the Depression scale of DASS-42.

Data analysis was performed with the SPSS software program. Descriptive statistical analyses included frequency, frequency percentage, charts and tables and the calculation of distribution. Inferential statistical analyses included mean, absolute frequency and relative frequency in order to express the characteristics of the units under study and determine their level of depression. To investigate the relationship between depression and other variables, the researcher deployed the chi-square test, the ANOVA and Pearson's correlation coefficient (for testing the presence or absence of a statistically significant difference between the prevalence of depression and the variables of age, occupation of the parents, education of the parents, living conditions, emotional family relationships, monthly family income, family size, etc.). Based on the results of the Beck Depression Inventory

#### RESULTS AND DISCUSSION

This study was conducted on 70 duty personnel at (A) city police headquarters (26% with college education, 74% without college education). The mean age of the duty personnel with college education was 24.96 with a standard deviation of 0.44 whereas the mean age of the duty personnel without college education was 19.2 with a standard deviation of 0.36. The Beck Depression Inventory yielded the following results: Without Depression (20%), Mild Depression (41.42%) Moderate Depression (37.14%) and Severe Depression (1.42%) (See, Tables 1 and 2).

Table 1 - Severity of depression in all duty personnel at (A) city police headquarters in 2012 according to the Beck

Depression Inventory

| Expression in ventory  |                    |           |  |
|------------------------|--------------------|-----------|--|
| Severity of depression | Relative frequency | Absolute  |  |
|                        |                    | frequency |  |
| Without Depression     | 20                 | 14        |  |
| Mild Depression        | 41.42              | 29        |  |
| Moderate Depression    | 37.14              | 26        |  |
| Severe Depression      | 1.42               | 1         |  |
| Total                  | 100%               |           |  |

Table 2 - Frequency of depression in all duty personnel at (A) city police headquarters in 2012 according to the Beck

Depression Inventory

| Depression inventory |                    |                    |  |
|----------------------|--------------------|--------------------|--|
| Depression           | Relative frequency | Absolute frequency |  |
| Non-depressed        | 20                 | 14                 |  |
| Depressed            | 80                 | 56                 |  |
| Total sum            | 100                | 70                 |  |

Also, the Depression Anxiety and Stress Scale (DASS-42) yielded the following results: on the Depression Scale: Natural (17.94%), Mild (44.97%), Moderate (36.10%), and Severe (1.92%); on the Anxiety Scale: Natural (27.34%), Mild (43.26%), Moderate (28.40%), and Severe (1.92%); and, on the Stress Scale: Natural (24.46%), Mild (34.82%), Moderate (39.72%), and Severe (1.92%) (See, Tables 3 and 4).

Table 3 - Frequency of depression, anxiety and stress in all duty personnel at (A) city police headquarters in 2012

| Severity    | Stress (F %) | Anxiety (F %) | Depression (F %) |
|-------------|--------------|---------------|------------------|
| Normal      | 24.46        | 27.34         | 17.94            |
| Mild        | 34.82        | 43.26         | 44.97            |
| Moderate    | 39.72        | 28.40         | 1.36             |
| Severe      | 0            | 0             | 0                |
| Very severe | 1.92         | 1.92          | 1.92             |
| Total       | 100          | 100           | 100              |

Table 4 - Prevalence of depression, anxiety and stress in all duty personnel at (A) city police headquarters in 2012

| Severity  | Stress (F %) | Anxiety (F %) | Depression (F %) |
|-----------|--------------|---------------|------------------|
| Without   | 24.46        | 27.34         | 19.94            |
| With      | 75.54        | 72.66         | 82.06            |
| Total sum | 100          | 100           | 100              |

Table 5 presents the data on the relationship between the prevalence of depression and demographic variables

Table 5 - The relationship between the prevalence of depression and demographic variables

| Row | Variable  | p value |
|-----|---|---------|
| 1   | prevalence of depression and age                            | 0.005   |
| 2   | prevalence of depression and educational degree             | 0.035   |
| 3   | prevalence of depression and occupation of the parents      | 0.003   |
| 4   | prevalence of depression and education of the parents       | 0.002   |
| 5   | prevalence of depression and living conditions              | 0.003   |
| 6   | prevalence of depression and emotional family relationships | 0.042   |
| 7   | prevalence of depression and monthly family income          | 0.014   |
| 8   | prevalence of depression and family size                    | 0.015   |
| 9   | prevalence of depression and units of service               | 0.072   |
| 10  | prevalence of depression and religion                       | 0.18    |

There are significant relationships at (p < 0.05).

### **Conclusion:**

According to the results of this study and based on the Beck Depression Inventory, the prevalence of depression (mild, moderate, severe) is estimated 80% in total. Also, according to the DASS scale, the prevalence of stress (mild, moderate, severe, very severe) is estimated 82.06% in total, the prevalence of anxiety (mild, moderate, severe, very severe) is estimated 72.66% in total, and the prevalence of anxiety stress in the personnel under study is estimated 75.54% in total. Considering that our target population only included male participants and the fact that there is no similar study in this field in Iran, it is not possible to perform statistical comparisons with other communities. A study in Ilam, Iran, showed that 35.3% of students are healthy whereas 41% suffer from mild depression, 18.8% moderate depression, 3.5% severe depression, and 1.4% very severe depression (Torabi, 2003). Another study conducted in Ahvaz, Iran, showed that 55% of students are healthy whereas 55% suffer from mild depression, 8.5% from moderate depression, 1.5% from severe depression, and 0.5% very severe depression (Ahmadi, 1995) Mas'udzadeh et al. (2004), Rashidi Zavieh et al. (2004), and Zaraee et al. (2001) also have reported a significant relationship between the prevalence of depression and the variables of age and family characteristics - which is consistent with the results of this study. The results of this study and other studies conducted in this field show that in general the prevalence of mental disorders, especially depression, among adolescents and young adults in today's society is higher than normal. The prevalence of other mental disorders such as anxiety and stress is also very high. Adolescents and young adults make the future of any country. Therefore, paying attention to this important concern in the era of competition and progress poses a significant responsibility to health authorities especially those who are somehow involved with the education of adolescents and young adults. The armed forces of any country embody its national power, and the young population represents its glory and magnificence. Thus, paying attention to this vulnerable yet vital stratum of society – not merely with an instrumental approach – in macro-level programs and policies of the country will lead to the ever-increasing development and independence of Iran. High-spirited duty forces free of mental disorders or concerns in the modern world will apply all their potentials to better serve the goals and ideals of the Islamic Republic of Iran. Hence, special attention to today's young people especially the armed forces requires the preparation and revision of programs since adolescence to old age. A focus on the requirements and the causes involved in this case and the formulation and implementation of policies related to this subject with the objective to increase confidence and reduce mental disorders can to a large extent prevent the paralysis of the community, especially young people and the armed forces as part of this stratum that function as the white cells of the country.

# Suggestions for empowerment and building self-esteem among the armed forces and the reduction of mental disorders among them:

- 1. Planning and organizing scientific conferences and programs in the country for soldiers
- 2. Providing more recreational facilities with fewer limitations
- 3. Paying special attention to the psychological security of the armed forces, including soldiers and personnel, in the country's macro-level policy making and planning
- 4. Providing a context for reducing the psychological pressure of families on children by training families through newspapers and other media and communication tools.
- 5. Providing pre-planned and useful scientific trainings for the personnel at headquarters.
- 6. Providing a context with leisure and recreation opportunities so that soldiers can cultivate their minds and bodies and do not feel aversion because of repetitive activities.
- 7. Providing a context in which soldiers can express creatively and are distributed in units based on their expertise.
- 8. Providing a context in which soldiers can actualize their internal talents and do not feel self-alienated or develop a low self-esteem.
- 9. Assigning and dividing responsibilities based on motivation rather than compulsion.

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