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# The prevalence of mental disorders among Iranian rural population during 1996- 2005; an epidemiology of Ex- Post facto study

Fathola Mohamadian<sup>1</sup>, Ali Khorshidi<sup>2</sup>, Samira Faramarzi<sup>1</sup> and Ashraf Direkvand-Moghadam\*<sup>3</sup>

<sup>1</sup>Psychosocial Injuries Research Center, Ilam University of Medical Sciences, Ilam, Iran
<sup>2</sup>School of Health, Ilam University of Medical Sciences, Ilam, Iran
<sup>3</sup>Psychosocial Injuries Research Center, Faculty of Nursing and Midwifery, Ilam University of Medical Sciences, Ilam, Iran

#### **ABSTRACT**

Residents in Ilam are high risk for psychiatric morbidity. This study was conducted to determine the prevalence of common mental disorders. In an epidemiology of Ex- Post facto study investigates the status of mental disorders among the rural population of Ilam province, the west of Iran during 1996- 2005. A census sampling method was used. Mental disorders were classified into five sub-groups including; severe mental disorder, minor mental disorder, epilepsy, intellectual disability and others. The prevalence of any disorder was expressed by a frequency of each disorder per 1000 persons. Data were collected by trained health care providers using a questionnaire. Totally, 201,432 rural residents enrolled to study. The overall prevalence of mental disorders was 17.5 per 1000 persons. The minor mental disorder was the highest type of mental disorders among the study population. The prevalence of mental was higher in female than male. There was a significant relationship between gender and mental disorders (P= 001). About one-fifth of the study population suffer from mental disorder. Women and the age group 35-44 has the highest prevalence of psychiatric disorders than others.

**Keywords:** Ex- Post facto study, Ilam province, mental disorder

## INTRODUCTION

Today, the mental disorders are important issue in worldwide (1-3) and 17.6% of individual experienced a common mental disorder at some time during their lifetimes (4). The accurate prevalence of mental disorders is unclear from 4.3% in Shanghai to 26.3% in the United States (5). About 13.2 % of all China population experience a type of mental disorder in their life (6). A study reported that 6.7% of American adults experienced a major depressive episode in the past 12 months (7). In another study, the overall prevalence of mental disorders was 36.6% among adult population attending a primary health care setting in Qatari (8).

In European population approximately one in four people has been experiencing a DSM-IV disorders in their life (9). A US study reported the personality disorder among 14.79% of the study population (10).

In general, anxiety disorders, has been reported as the most common type of mental disorders in the general population (11).

Neuro-psychiatric disorders are reported as a cause of more than 25% of all health loss due to disability (12). World Health Organization presented the unipolar depression as the third most important cause of disease burden worldwide during 2004.

There are several risk factors for neuro-psychiatric disorders, including the gender (4, 13, 14), age, location, education level, occupation and marital status (13, 14).

Since Ilam province is located in the western border of Iran and many years have been exposed to war, on other the hand the rate of unemployment is more than the national average. Therefore, they are high risk for psychiatric morbidity. Hence, this study was conducted in the primary health care centers to determine the prevalence of common mental disorders in Ilams population.

# MATERIALS AND METHODS

Current research is an epidemiology of Ex- Post facto study. In this study was to investigate the status of mental disorders among the rural population of Ilam province, the west of Iran during a 10 year period (1996- 2005). The program implemented by the Department of Mental Health of the Ministry of Health of the Islamic Republic of Iran. All residents of rural areas, in all age groups were enrolled in the study by the census sampling method. Mental disorders were classified into five sub-groups including; severe mental disorder, minor mental disorder, epilepsy, intellectual disability and others. The prevalence of any disorder was shown by a frequency of each disorder per 1000 individuals. Also the prevalence of each disorder was estimated based on specific age groups and gender of the participant.

Data were collected by trained health care providers using two questionnaires. The first questioner as the demographic questionnaire was including the age, gender, location of the participants. The second questionnaire was designed on the basis of the information needed to diagnose mental disorders and questioner content was approved by an expert panel. If an individual was suspected for mental disorders, who were referred to a G.P trained in the field of mental disorders. After confirming the psychiatric disorders, the case was recorded as an impairment. All mild cases treated by trained G.P and the specialist cases were referred to the specialist doctors for specialized treatment.

This study was undertaken with the approval of the Ethical Committee of the Ilam University of Medical Sciences, Iran. To enhance confidentiality, all questioners were completed anonymously and only required information was collected

SPSS software Package was used to analyze the data of this project. Mean $\pm$  SD, median and percentages were used to describe the data.

### **RESULTS**

Overall, the status of mental disorders was evaluated among 201,432 rural residents of Ilam province during 1996-2005. The participants were included 103398 male and 97834 female. The age group was divided into five subgroups. The prevalence of participants age group based on the gender is presented in table 1.

Table 1: The prevalence of age group based on the gender among the rural population of Ilam, Iran during 1996- 2005

Age group (year)	Male	Female	Total
0-14	40893	39143	80036
15-24	25309	23215	48524
25-34	13136	13286	26422
35-44	8556	9633	18189
≥ 45	14567	12424	26991
Total	103398	97834	201432

The overall prevalence of mental disorders was 17.5 per 1000 persons. The minor mental disorder was the highest type of mental disorders among the study population (7.7 per 1000 persons). The distribution of mental disorders based on age group is presented in table 2.

Table 2: The prevalence of mental disorders based on age group among the rural population of Ilam, Iran during 1996-2005

Age group (year)	Severe mental disorder *	Minor mental disorder*	Epilepsy*	Intellectual disability*	Others*
0-14	0.2	0.9	3	4.9	2.2
15-24	1.2	5.4	2.2	4.7	0.7
25-34	3.7	17.9	2.7	3.9	2
35-44	3.9	20.9	2.8	1.7	1.5
≥ 45	4	13	1.7	0.4	0.9
Total*	1.8	7.7	2.6	3.8	1.5

\* per 1000 persons

The prevalence of mental was higher in female than male (20.3 Vs 14.7 per a thousand of people). There was a significant relationship between gender and mental disorders (P=001).

Table 3: The prevalence of mental disorders based on the gender among the rural population of Ilam, Iran during 1996-2005

Type of mental disorders	Male		Female	
	N	Per 1000 persons	N	Per 1000 persons
Severe mental disorder	196	1.9	162	1.6
Minor mental disorder	398	3.8	1145	11.7
Epilepsy	293	2.8	239	2.4
Intellectual disability	482	4.6	292	3
Others	161	1.5	154	1.6
Total	1530	14.7	1992	20.3

#### **DISCUSSION**

Ilam province is western border of Iran. A long face with war and high unemployment on the other hand has led the province's interest to health planners. So far, various aspects of health have been studied between different groups in this province (15, 16). In the present study, the status of mental disorders was evaluated among rural residents of Ilam province during 1996- 2005.

The results of the present study reported that the percentage of mental disorders in Ilam province are 17.5 per 1000 persons in all age groups. Based the report of the World Health Organization 450 million people suffer from some form of mental disorders (8). The prevalence of mental disorders has been reported from 4.3% to 26.3% in different area of the world (5).

We evaluated the mental disorders using a questioner that its content was approved by an experts panel through the present review, when individuals were suspected for mental disorders, who were referred to a trained G.P to confirming the psychiatric disorders. Always, the researcher have been screened their study population by use of a screening tool such as SCL-90 or GHQ in the first stage, when the individuals were highly suspected for a mental disorder based on the screening entered the second stage which consisted of a diagnostic clinical interview. Several studies have been evaluated the mental health status in different age groups and different situation in Iran using different tools (14, 17, 18).

Mohammadi et al evaluated the prevalence of lifetime psychiatric disorders among the population of aged 18 and over using Diagnostic and Statistical Manual of Mental Disorders-IV. The researchers of this study reported the prevalence of psychiatric disorders in 10.81% of their study population (14). Another Iranian population-based study conducted to measuring psychological distress among the survivors of Bam earthquake in Iran. The results of this study reported the prevalence of severe mental disorder in 58% of the respondents (18).

The results of present study showed that the age group 35-44 has highest prevalence of psychiatric disorders than other age groups. The relationship between age and mental disorder have been reported in other studies (13, 14)

Based the results of present study, the prevalence of mental was higher in female than male. Several study in line whit our results, confirmed the relationship between the gender and higher prevalence of mental disorder (4, 13, 14).

# **CONCLUSION**

About one-fifth of the our population suffer from mental disorder. Women and the age group 35-44 has highest prevalence of psychiatric disorders than others. Therefore pay attention to plan programs in prevention and treatment of these disorders is necessity.

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