

Original Article

A Survey on Mental Health Status of Adult Population Aged 15 and above in the Province of Qom, Iran

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Abstract

Introduction: This research aims to determine the mental health status of population aged 15 and over in the province of Qom in 2015.

Methods: The statistical population of this cross-sectional field survey consisted of residents of urban and rural areas of Qom in Iran. An estimated sample size of 600 people was chosen using systematic random cluster sampling. The access was provided by the contribution of Geographical Post Office of Qom city. The General Health Questionnaire-28 (GHQ-28) was used as the screening tool for mental disorders. Data analysis in the current study was carried out using the SPSS-18 computer software.

Results: Using GHQ traditional scoring method, 16.2% of the subjects were shown to be at risk of mental disorders (19.7% of females and 12.6% of males). Urban areas (17%) were more at risk of mental disorders compared with rural residents (6.5%). Anxiety and somatization symptoms were more frequent than depression and social dysfunction among respondents. The obtained data revealed that the prevalence of mental disorders increased with age. Such disorders were more common in females, age group of 65 and above, people living in rural areas, divorced and widowed, illiterate, retired and unemployed individuals compared with the other groups.

Conclusion: The results of this study showed that a sixth of the people in the province were suspected to have mental disorders. Therefore, it is mandatory for the provincial public health authorities to take the needed steps to ensure that necessary requirements encompassing prevention and promotion of mental health are implemented.

Keywords: Adult population, general health questionnaire (GHQ-28), mental health status, Qom province

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Introduction

Qom Province is located in the central of Iran, with an area of 1152626 km². Its population is about 1,250,000 people, of whom 954,033 live in urban areas (95%) and 295,967 live in rural areas (5%). From this population, 675,040 people are males and 639,382 are females. This population inhabit Qom city (province). Their religion is Islam. The people are mostly Persians and speak the Persian language. Literacy rate of this province is 86.6%, the rate of unemployment is 11.3%, and the family size is 3.6.¹

Concerning health facilities, this province has 55 health centers, 46 of which are urban and 9 are rural. There are 59 health houses

in rural areas that provide health services to people. Regarding treatment facilities in this province, there are 10 general hospitals with 1650 beds. Among these hospitals, there is one hospital with 40 beds which provides inpatient services to psychiatric patients and also 60 beds in the psychiatric ward of a general hospital are allocated to these patients. So, there are 0.8 psychiatric beds per 10,000 people in Qom province. A total of 84 Methadone Maintenance Therapy (MMT) clinics and 2 centers of control and management of substances provide services of prevention and treatment to addicts. Regarding the mental health human resource specialists, there are 20 psychiatrists in Qom province. The number of physicians working in health centers is 100, and they provide mental health services to the urban and rural population of the province, especially delivering mental health services to patients who are under coverage of the national programs of mental health through family physician system.²

In the first national mental health survey conducted by Noorbala, et al. (1999), 490 individuals aged 15 and above were studied in the province. The result showed that 23.1% of them were suspected of mental disorders (18.3% male and 27.5% female).³

Regarding the importance of epidemiological studies in determining the mental health status of general population, detecting demographic features associated with these disorders and also estimating the required resources and facilities within the province, this study was conducted to examine and compare the mental health status of population in this province in the past 15 years.

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Materials and Methods

This research was performed in the form of a cross-sectional and field survey in Qom province in 2015. The population sample of this survey consisted of urban and rural residents of the province in the age group of 15 and above. The sample size was estimated as 600 people who were selected through systematic random cluster sampling and from among the people living in urban and rural areas of Qom city. The samples were selected using the Post Office Software.

The 28-item General Health Questionnaire (GHQ-28) was used as the screening tool for detection of mental disorders. This questionnaire was developed by Goldberg & Hillier (1979) for screening somatization, anxiety, social dysfunction and depression.⁴ A review of studies on the validation of the GHQ-28 in different countries demonstrates its high validity and reliability as the screening tool for mental disorders in the community.⁵ It includes four subscales with 7-item criteria related to the somatization, anxiety, social dysfunction and depression symptoms. There are different ways of scoring GHQ-28, such as Likert and the traditional scoring method.⁶ Using the traditional scoring method, the best cutoff point for this questionnaire was score 6 and for each subscales were 2. These cutoff points were obtained through a research on standardization of this screening tool in Iran.⁷

The survey started in December 2014 and lasted until January 2015. The survey team (a man and a woman) referred to the samples' houses based on their 10-digit Postal Code and beginning with each of head clusters in accordance with the survey completion guideline manual. Based on six age groups (15

to 25 years, 26 to 35 years, 36 to 45 years, 46 to 55 years, 56 to 65 years and 66 years and over), 12 adults (6 males and 6 females) were evaluated in each cluster. In each research unit (Household), only one person was examined. In cases when more than one individual was eligible, the sample was selected randomly.

Data related to the survey were analyzed using the SPSS-18. Logistic regression modelling was used to determine the factors that affect mental disorders. The average time to complete each questionnaire was 45 minutes.

Results

A total of 557 persons completed the questionnaire. Data regarding prevalence of suspected cases of mental disorders in terms of gender, place of residence, age, marital status, education and occupation are presented in Table 1. The results showed that 16.2% of the samples (19.7% of females and 12.6% of males) were suspected to suffer from mental disorders. The highest prevalence of mental disorders was in the urban areas (17%), individuals aged 65 and over (29.2%), divorced or widowed (39.6%), illiterate (22.7%) and retired people (22.7%).

Information related to logistic regression of variables and the odds ratio is presented in Table 2. Based on the logistic regression analyses (Table 2), the results indicated that females had a relative risk of mental disorders of 2.238 compared with males. The risk of mental disorders increased significantly with age. Divorced or widowed people were 3.150 times more at risk of mental disorders compared with married people. The highest risk of mental disorders pertained to retired and unemployed people, who were 1.883 times more at risk of mental disorders compared with

Table 1. Prevalence of mental disorders in terms of the demographic variables (n= 557)

Variables	Sample size (n)	Suspected cases (n)	Prevalence rate (%)
Gender			
Male	278	35	12.6
Female	279	55	19.7
Place of residence			
Urban	511	87	17.0
Rural	46	3	6.5
Age group (years)			
15-24	76	6	7.9
25-44	196	29	14.8
45-64	189	27	14.3
+65	96	28	29.2
Marital status			
Unmarried	435	65	15.0
Married	74	6	8.1
Widowed, or divorced	48	19	39.6
Occupation			
Employed	162	18	11.1
Unemployed	53	13	22.6
Student	43	4	9.3
Housewife	234	45	19.2
Retired	60	10	16.6
Education			
Illiterate	264	60	22.7
Primary & secondary	88	8	9.1
Diploma	105	16	15.2
Graduated	65	5	7.7
Post Graduated	15	1	6.7
Total	557	90	16.2

Table 2. Estimated logistic regression coefficients and odds ratios

Variables	B	S.E.	Sig.	OR	95% C. I. for OR	
					Lower	Upper
Marital Status						
Married	---	---	---	---	---	---
Unmarried	0.459	0.568	0.294	1.582	0.520	1.419
Widowed, or divorced	1.253	0.725	0.001	3.150	0.845	3.177
Gender						
Male	---	---	---	---	---	---
Female	0.805	0.475	0.022	2.238	0.882	2.976
Age	0.003	0.011	0.773	1.003	0.981	1.026
Place of residence						
Rural	---	---	---	---	---	---
Urban	1.055	0.621	0.003	2.872	0.850	3.697
Occupation						
Employed	---	---	---	---	---	---
Unemployed	0.474	0.450	0.292	1.607	0.665	3.882
Student	0.278	0.696	0.689	0.821	0.338	5.165
Housewife	-0.534	0.512	0.298	1.586	0.215	1.601
Retired	-0.124	0.511	0.088	1.883	0.325	2.403
Education						
Post Graduated	---	---	---	---	---	---
Graduated	0.077	1.148	0.946	1.080	0.214	1.852
Diploma	0.873	1.092	0.424	1.394	0.582	3.535
Primary & Secondary	0.063	1.136	0.956	1.065	0.615	1.859
Illiterate	1.115	1.089	0.032	2.051	0.361	2.790

employed people. Illiterate individuals were 2.051 times more vulnerable to mental disorders than people with postgraduate degrees and above.

The results also showed that 32.6% of the studied sample scored high on somatization subscale (28.5% of males and 36.8% of females), 33.1% on anxiety subscale (31% of males and 35.3% of females), 15.8% on social dysfunction subscale (14.6% of males and 16.1% of females), and 11.6% on depression subscale (10% of males and 13.1% of females).

Discussion

The results of this study showed that a sixth of people were suspected to suffer from mental disorders in Qom province. The prevalence rate of mental disorders in the first mental health survey in this province was 23.1%,⁸ which demonstrates a considerable decrease in the prevalence rate of mental disorders from 23.1% to 16.2%.⁹ The decrease in prevalence rate of mental disorders in the province can be related to the changes which have occurred in the social, living, economic and political structures of the country at the time of research.

In this study, the prevalence rate of suspected cases of mental disorders was higher in females (19.7%) than males (12.6%). Review of the studies conducted worldwide¹⁰ and in Iran¹¹⁻¹³ indicates that the prevalence rate of mental disorders is higher in females. This higher prevalence rate can be due to biological factors, gender role, environmental and economic problems, limited satisfaction and also social participation restrictions. Of course, the process of changes in prevalence rate of mental disorders from the year 1999 to 2015 is also notable because the prevalence rate of mental disorders in females has decreased from 27.5% to 19.7%, and in males from 18.3% to 12.6%. It

means that the prevalence rate of mental disorders has decreased among females and males.

Considering place of residency, the prevalence rate of suspected cases of mental disorders was higher in people living in urban areas (17%) than rural areas (6.5%), which is consistent with the findings of the first mental health survey in this province in 1999.¹¹ Economic problems and environmental factors can be the reasons behind the higher prevalence rate of mental disorders in comparison to the rural residents studied in this province.

The results of this study showed that the prevalence rate of suspected cases of mental disorders increased with aging, and highest rate pertained to the age group of 65 years and above (29.2%) which is consistent with the findings of the first mental health survey in the province in 1999. Most of the studies carried out in Iran and other countries,⁹⁻¹³ indicate that the higher prevalence rate of mental disorders in the retirement period can be due to factors like disability, menopause and biological changes of individuals.

Regarding literacy, the results showed a higher rate of mental disorders in illiterate individuals (22.7%) compared with the other groups, which is consistent with the findings of most studies in Iran.¹¹⁻¹³ Social and cultural restrictions and also disability of individuals in using effective methods of stress management can be considered as reasons for higher prevalence rate of mental disorders in this age group and lower prevalence rate for graduated individuals.

The findings of this study showed a higher rate of mental disorders in retired and unemployed individuals compared to the other groups, which is in line with the findings of most studies done in Iran.^{11,13} The economic problems in case of males and social restrictions and biological factors influencing the life styles of females can be considered as probable reasons behind the

higher prevalence rate of mental disorders, which is consistent with the findings of other researches in Iran.

With regard to marital status, the results indicated that widowed or divorced population were more vulnerable compared to the other groups. Problems caused by losing the dear ones or separation can be considered among the reasons behind the higher prevalence rate of mental disorders in this group compared with unmarried and married individuals.

The findings of this study on GHQ subscales showed that the prevalence rate of somatization, anxiety, social dysfunction and depression was higher in females than males, which confirms the findings of the 1999 research.³ Review of the related research literature indicates that anxiety and social dysfunction symptoms are more common in males and depression and somatization in females. Regarding these subscales, the changes that have occurred in the past 15 years can be due to the changes in the economic, cultural and social status of females in comparison to males.

Conflict of interest

The authors declare that they have no conflict of interest.

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