General health status in Iranian university students; A cross-sectional study

**Ataollah Hashemian[1], Ashraf Direkvand-Moghadam[1]* and
Azadeh Direkvand-Moghadam[2]**

[1]*Psychosocial Injuries Research Center, Ilam University of Medical Sciences, Ilam, Iran*
[2]*Student Research Committee, Ilam University of Medical Sciences, Ilam, Iran*

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ABSTRACT

Enter university, is a critical period in the lives of young people and is often associated with changes in social relations and human.The present study aimed to determine the general health status in Iranian university students in 2014. In a Cross – Sectional study evaluated the general health status among 1066 university students in Ilam, in 2014. A multi-stage sampling method was used. Data was collected by demographic and General Health Questionnaire- 28. All collected data were analyzed using SPSS version 1. A P value of 0.05 was considered statistically significant. Overall 62.8% students put into the health status. But 37.2% of all participants have disorder in one or more dimensions of their general health status. The Mean ± SD overall score of general health was 4.9 ± 1.1 in healthy and 11.93 ± 2.15 in disorder status students (P < 0.000). Age, gender, parental occupation, parental education, education field and education levels were different between the groups (P > 0.05). Age, gender, parental occupation, parental education, education field and education levels are main effective factors in general health status of university students.

Key words: Cross – Sectional study, Iranian university students, GHQ-28
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INTRODUCTION

Iran has a large network of private and public universities and 3.5 million students enrolled in Iran universities in 2008. Enter university, is a critical period in the lives of young people and is often associated with changes in social relations and human. Students are prone to losing their mental health due to the particular circumstances, including; family separation, economic problems, lack of sufficient income, high volume courses and intensive competition (1).

Age, gender , income, health care services, physical and social environments, education and literacy, personal health practices, coping skills and healthy child development are main effective factors on health state (2, 3).

Students often experience varying degrees of stress, anxiety, and depression during their time in college. These problems affect the learning ability and academic performance of students (2). A study reported the mental health issues have been increased in the college student in recent decades (4) and suicide is a leading cause of death among this group (5).

About 80 percent of college student don't fit regular exercise into their schedules (6). A study investigated the effect of gender on students' health habits and motivation for a healthy lifestyle among 479 Sweden students and reported

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the female students had healthier habits related to alcohol consumption and nutrition but were more stressed. overweight and obesity were higher in male students (7).

Students health status has an important role in students learning ability and students performance. Several studies evaluated the relationship between general health and students' performance (8-10).

Usually, the students experience some degrees of stress, anxiety, and depression during their time in college. It well known that identify the students health status can provide a healthy lifestyle counseling. Therefore, the present study conducted to determine the general health status in Iranian university students.

MATERIALS AND METHODS

In a Cross – Sectional Study, we assessed 1066 university students in medical (Ilam University of Medical Science) and non-medical (Ilam University, Islāmic Azad University and Institute of Applied Science Technology Jahad Daneshgahi) universities in Ilam in 2014. The general health status was unknown in our study population. Hence , we have considered P=0.5. Sample size was determined by d=0.03 and confidence interval 95%.

A multi-stage sampling method was used. Data was collected by demographic (age, gender, parents´ occupation, parents´ education, number of children) and General Health Questionnaire- 28 (GHQ-28).

The GHQ-28 has been developed by Goldberg in 1972 and it used in epidemiological studies (11). GHQ-28 can explore psychiatric disorders in different situations. This standard questioner has been translated into several languages and used internationally. Validity and reliability of GHQ-28 Test have been confirmed in previous studies (12-14) and Iranian population (15).

MEASURES
GHQ-28 have four main domain including physical symptoms (items 1–7), anxiety and insomnia (8–14), social dysfunction (15–21) and severe depression (22–28). There are several different scoring methods for GHQ-28. The traditional scoring method provided assigns a score of 0 for responses 1 and 2 ("not at all" and "no more than usual") and a score of 1 for responses 3 and 4 ("rather more than usual"and"much more than usual") (16-18). Another scoring option is Likert method to indicate symptom severity, which scores the item response between 0–3 (0–1–2–3, subscale range) (15).

In the present study, traditional scoring method was used. Therefore, we consider score 0 for responses 1 and 2 and score 1 for responses 3 and 4. Based the result of an Iranian study, a cut-off point 6 is suitable in the Iranian population. So that, we considered all students who receive a score of 6 or less as healthy students. Those students who receive a score of 7 or higher were considered as disorders students (15).

Ethics
This study was conducted with the approval of the ethics committee of Ilam University of Medical Sciences. The aim of the study was described an informed consent was obtained from all participants. To enhance confidentiality, all questionnaires were completed anonymously and only required information was collected. . All collected data were analyzed using SPSS version 16.

RESULTS

In total 1066 student participated in the study. Overall 669 (62.8%) students put into the healthy status. But 397(37.2%) of all participants have disorder in one or more dimensions of their general health status. The Mean ± SD age was 25.36 ± 6.28 and 26.27 ± 5.75 years in healthy status students and disorder status students, respectively (P = 0.017).

Variables such as age, gender, parental occupation, parental education, education field and education levels were different between the groups (P> 0.05). Demographic characteristics of study participants are presented in table 1.

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The Mean ± SD overall score of general health was 4.9 ± 1.1 in healthy status students and 11.93 ± 2.15 in disorder status students. The difference in overall score of general health was statistically significant between healthy and disorder status students (P < 0.000).

The Mean ± SD scores of all demission of general health was differences between healthy and disorder status students. (P< 0.05). Comparisons of general health demission are presented in table 2.

DISCUSSION

In the present study investigated the general health status among 1066 Iranian university students in 2014 in Ilam, Western of Iran. Adolescents' and young general health status is an important issue and have vary impact on the human life. Hence , several studuy have been evaluated the effective factors on general health status in these groups (16-19)

However, the researchers used of difference measurement scales such as QoL[1] and SRH[2] (19), PQFR[3] (20) and SDQ[4] (21) but also the GHQ-28 is considering as a valid screening tool in Iranian population (15, 16). Hence, in the present study, we used of used GHQ-28.

Different studies have used different cut-off points for the estimation of the overall health status of their populations studied. However, in the present study, we used of a cut-off point 6 in our population. All participants who receive a score of 6 or less are considered as healthy. Those who receive a score of 7 or higher are considered as disorders.
Based the results, 62% of students put into the healthy status. In a cross-sectional 44% of all participants reported a health compilation (22). The present study reported several factors as main influencing factors on general health status in university students including age, gender, parental occupation, parental education, education fild and education levels. A study shown the effect of gender on health status among 125732 girls at 11- 15-year-olds (18). In another study, family climate, low socio-economic status, poor social support and decreased mental well-being of the parents were the main influencing factors on mental health in children and adolescents in 12 European countries (21). In a study, the older adolescents (OR: 1.1-1.6), gender(girls; OR: 1.2-1.4) and low socio-economic status (OR: 1.4-2.3) was associated with health problems (22)

Table 1: Demographic characteristics and other factors related to health status among university students in Ilam in 2014

Characteristics	Group		Total	p- value
	Health; 669 (62.8%)	Disorder; 397(37.2%)		
Age*	25.36 ± 6.28	26.27 ± 5.75		0.017
Gender**				
Male	237(57.7)	174(42.3)	411(38.5)	0.004
Female	423(34)	174(42.3)	655(61.5)	
Educational field**				
Medical subgroups	511(61.2)	324(38.8)	835(78.3)	0.026
Nonmedical subgroup	157(68.4)	73(31.6)	231(21.7)	
Educational level**				
Associate	46(48.8)	49(51.6)	95(8.9)	0.000
Bachelor	401(67.3)	195(32.7)	596(55.9)	
Master	89(57.8)	65(42.2)	154(14.4)	
GP	123(69.5)	54(30.5)	177(16.6)	
PhD	10(22.7)	34(77.3)	44(4.1)	

* Mean ± SD ; ** N(%)

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[1] - Quality of life

[2] - Self-Rated Health

[3] - Perceived Quality of Financial Resources

[4] - Strengths and Difficulties Questionnaire

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Table 2: Comparison of health demission scores among university students in Ilam in 2014

Demission Scor*	Group		P- value
	Healthy*	Disorder *	
Physical	1.59 ± 0.88	2.59 ±1.03	0.034
Anxiety and sleep disorders	1.56 ± 0.85	2.68 ± 1.12	0.033
Social dysfunction	2.42 ± 1.61	2.41 ± 1.38	0.062
Depression	1.34 ± 0.7	2.26 ± 1.38	0.027

* Mean ± SD

In the present study, we studied 4 demission of general health including physical symptoms, anxiety and insomnia, social dysfunction, and depression. Based our result, all demission of general health was statistically significant difference between healthy and disorder groups. However, some studies focused on a special demission of health such as mental health (23-27). A cross-sectional reported that the occupational stress is a major risk factor for poor mental health (27).

CONCLUSION

General health is an important issue in university students. Age, gender, parental occupation, parental education, education field and education levels are main effective factors in general health status of university students. Hence, evaluation the students' general health status is necessary to planning an appropriate counseling program.

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