



Scholars Research Library

Der Pharmacia Lettre, 2016, 8 (3):110-115
(<http://scholarsresearchlibrary.com/archive.html>)



The survey of Zahedan medical sciences university students' psychological health status

Ali Reza Salar¹ and Sadegh Zare^{2*}

¹Pregnancy Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran

²Student Scientific Research Center, Zahedan University of Medical Sciences, Zahedan, Iran

ABSTRACT

Entering to university is a very sensitive period in effective and active youngsters' lives in every country and it is usually accompanied by great variations in social relations, expectations and role takings. These variations are also accompanied by worries and stress and influence the students' psychological health. Based on this, the present article aims at the survey of Zahedan medical sciences university students' psychological health status. In the present descriptive-analytical research, 567 university students from Zahedan medical sciences university were selected based on a random-classification method and they were included in the study. Information gathering tool was a questionnaire containing personal characteristics and a 28-question psychological health test as well (general health questionnaire, GHQ-28) which was completed according to a self-static method. The gathered information was analyzed by making use of SPSS 18. The results obtained in the present study indicated that totally 46.4% of the students were not psychologically healthy (based on the cutting-point of higher than 23 in GHQ-28). Also, there was a significant discrepancy between the students' psychological health scores based on being native and nonnative and also the interest rate in the field of study ($P < 0.05$). This was while there was no significant difference between students' psychological health based on variables including gender, marital status and employment. According to the results obtained by the present study performing psychological evaluations upon entrance to the university and during the education course and offering specialized psychological health services are recommended in order for the students' psychological health to be enhanced.

Keywords: psychological health, medical sciences students, general health questionnaire (GHQ-28)

INTRODUCTION

The subject of healthiness has always been the topic of human beings' discussions from the very beginning of human life, but whenever there has been a talk over such a subject it was usually meant the physical aspect and the other health aspects and especially psychological health has been less attended to [1]. But, in the 21st century, the fast technological and communication sciences advancement pace and the cultural and social borders desolation and the today's human perplex life and also readily available access to the latest information (useful and non-useful) have confronted the people's psychological health with new and abundant challenges [2], in a way that nowadays the affective and psychological disorders are among the important factors increasingly resulting in problems, inabilities and reducing the life quality in all of the societies [3]. Psychological health is the prerequisite for an individual, satisfactory, effective and useful life and psychological health of the various classes of the society, especially the effective and constructive society members is the precondition for the society's dynamicity, magnificence and excellence [4].

According to the world health organization (WHO) reports, the world has been bearing witness to substantial variations regarding diseases epidemiology and individual health requirements and needs in such a manner that noncontagious diseases such as psychological ailments are quickly substituting the infectious and contagious diseases and they are on top of the inability creating diseases list and early death [5]. Entering university is a very sensitive period in the effective, active and young potential future workers. Being placed in special conditions such as entering a bigger community, educational environment, with socially and culturally different specifications, economical problems, not being interested in the field of study one is studying in, being distant from one's family, inconsistency with the other students and individuals in this new life environment, insufficiency of the welfare and economical facilities and generally enormous variations in personal and social life are frequently accompanied by pressure and worries which can generally lead to psychological disorders and problems and performance slump [6]. University students with psychological disorders mostly experience common problems related to their education such as concentration problems, distraction, inappropriate behavior, social skills deficiencies, loneliness, easily aroused behaviors and extreme anxiety. Such problems substantially face them with barriers and complexities with their study and education and make them waste a great deal of their intellectual force on challenging such problems instead of spending on activities concerning education issues and affairs [7]. The conducted studies regarding the Iranian students is indicative of not so much pleasant findings related to the students' psychological health. In a study performed by Dadkhah et al on Ardabil medical sciences university students it was shown that the psychological disorders prevalence rate was 22.7% [8]. Tavakkolizadeh and his colleagues also reported the psychological disorders prevalence rate in Genabad medical sciences university students as equal to 31.6% [7].

Youngsters are considered as the most vital assets of every land and from among them university students as the intelligent youth of every country play an in depth role in the way a community develops and advances [9] and their psychological health plays a significant role in the society's dynamicity and effectiveness. Medical sciences university students meanwhile facing problems imposed on them by the other students, they also face difficulties specific to themselves from among which we can refer to the environment psychological-mental pressures (hospital, medical centers and emergency units), confrontation with patients' problems and issues [1].

In some of the studies performed it has become clear that psychological disorders prevalence in medical sciences students has been higher respective to the normal population and the medical sciences usually have been regarded as a stressing environment which is often of a negative impact on the education performance, physical and mental health [10]. For instance, Loyd and Cartrel in a study on the medical students showed that the psychological symptoms prevalence is higher in comparison with the normal population [11].

Loyd and Mozher also in their study figured out that the dentistry students suffer from the psychological disorders more than the general public [12]. Therefore, it seems that medical sciences students are more likely to lose their psychological health than the other university students. Thus, the present study was conducted aiming at the survey of Zahedan medical sciences university students' psychological health status.

MATERIALS AND METHODS

The present study has been performed based on a descriptive-analytical method. The present study population is comprised of all of Zahedan medical sciences university students. The study sample volume in the present study has been calculated as 522 individuals considering a 4% accuracy and confidence coefficient of 95% and a 32% prevalence rate of the psychological disorders in medical sciences students which was obtained from the previous similar studies [7] and in order to increase the study accuracy here it was made use of 570 individuals and they were asked to complete the questionnaires from among which 3 questionnaires were omitted due to being imperfect and the final analysis was performed by taking advantage of 567 questionnaires (336 girls and 231 boys). The sampling method in the present study was multistep and such a manner that at the first stage the required sample proportion to participate in the study was determined for each of the faculties based on a classification method, according to the number of the students studying in each of the departments, and the number of girl and boy students in the entire university and in the second step the required sample needed from each of the faculties was selected by making use of the random digits table via taking advantage of the students list procured from the education office and students ID numbers and these were allowed to enter the study.

Information gathering tool was 28-question general health questionnaire (GHQ-28). This questionnaire was designed in 1979 by Goldberg and Heiler for screening the non-psychotic psychological disorders. The

questionnaire has 4 secondary scales (physical, anxiety, social function, depression symptoms) and each of the scales poses 7 questions. For scoring the Likert style (0, 1, 2, 3) the total score of which reaches 84. Based on the previous studies performed in Iran [1, 7] the cutting point of 23 was selected to determine the students with problems. In this way that the score 23 and higher in the entire test indicates the psychological disorders and 23 and lower are indicative of psychological health. Also, the cutting point of 6 was used for each of the physical complaints, depression and disorders in social functions scales. The questionnaire reliability with 25 students was calculated as 0.90 by making use of Cronbach alpha and the retest within a one-week interval it was calculated to be 0.89. The moral concerns were eliminated in the present study via making the questionnaires anonymous, receiving written consents and complete explanation of the study objectives to the participators. The obtained information from the questionnaires was edited by using SPSS version 18 and it was analyzed by making use of descriptive values and t-test for independent groups in the significance level of 0.05.

RESULTS

The results obtained from the data survey indicated that out of 567 university students 59% were female and 41% were male. Also, 86.6% of the students were single and 13.4% were married and 40.7% were studying in medicine field of study, 16.6% in paramedical, 14.5% in hygiene, 17.3% nursing and mammography and 10.9% in dentistry. From among all of the students under study 44.3% were local or native and 6% were employed and 94% were not employed.

In the present study, the students' mean and standard deviation values in relation to the total score and the four scales of the test were: physical symptoms and signs (mean: 6.01, standard deviation: 4.2), anxiety symptoms and signs (mean: 5.5, standard deviation: 4.58), social function (mean: 10.53, standard deviation: 4.75), depression symptoms and signs (mean: 3.7, standard deviation: 4.89), and in the total test score (mean: 25.76, standard deviation 15.10) (table 1). Also, based on higher than cutting point 23, the psychological disorders suspicious cases prevalence rate was determined to be 6.4% (table 2).

Table 1: the mean and standard deviation of the students' scores in test scales

GHQ scales	Scores scope	Mean	Standard deviation
Physical signs	0-21	6.01	4.20
Anxiety signs	0-21	5.50	4.58
Social function	0-21	10.53	4.57
Depression signs	0-21	3.7	4.89
Total score of GHQ	0-84	25.76	15.10

Table 2: psychological disorders suspicious cases general prevalence rate

Cutting point	Frequency	Percent
Below the cutting point limit (normal)	304	53.6
Above the cutting point (with psychological problems)	263	46.4
Total	567	100

As it is observed in table 3 the mean total score for boy students (26.95) is higher than the girl students (24.03) and the native students mean score value (27.42) is larger than the nonnative students and this difference is statistically significant ($P < 0.05$). but, there was not observed significant difference between the single students scores (26) and married ones (24.22), also, employed students (25.70) and unemployed ones (25.76). Also, with an increase in the education field of study interest rate the psychological difficulties decrease, in such a manner that the mean total psychological health score in the students with lower interests in their schooling field of study is (33.6), in students with intermediate interest rate it is (26.79) and in highly interested students this score is calculated as (23.32) and these differences are statistically significant in ANOVA and TOKI tests ($P < 0.05$), this is while there was not observed significant difference among the students from various faculties and departments from the psychological health point of view.

Table 3: students' psychological health status based on demographical variables

Demographic factors		Frequency	Mean	Standard deviation	t-value	P*
Gender	Male	336	24.03	14.57	-2.29	0.02
	Female	231	26.95	15.36		
Residential status	Local	251	27.42	14.81	2.34	0.01
	Nonnative	316	24.44	15.22		
Employment status	Employed	34	25.70	14.55	-0.02	0.98
	Unemployed	533	25.76	15.15		
Marital status	Single	491	26.00	15.36	0.95	0.34
	Married	76	24.22	13.33		
Interest rate in the field of study	Low	75	33.6	17.1		**0.001
	Intermediate	230	26.79	14		
	High	280	23.32	14.9		

DISCUSSION

Undoubtedly, the most original and the most effective and indeed the most determining group in the development of the developing countries is the scientific institutions and particularly universities and its operators and actors, to wit the university students. In this respect, those individuals who have the required psychological health can participate in their societies and play a part, since psychological health is both the cause and the effect of the social, economical and cultural development of every community. Hence, the focus of the present study is on Zahedan medical sciences university students' psychological health. The findings of the present study indicated that the psychological diseases likely prevalence rate among the studied university students is 46.4%, which is consistent with the findings obtained by Mehri et al in Sabzevar university students the prevalence rate of which was reported to be 47.7% [13]. Salgi et al also, consistent to the findings obtained by the present study reported the psychological disorders prevalence rate in Kermanshah university students to be 47.2%. This amount of the prevalence rate obtained in our research is higher in comparison to the study conducted by Nabavi in Islamic Azad university medical students who reported the psychological disorders prevalence rate of 19% [14]. One reason for this great discrepancy in the results, some cases such as the survey of only the new comers to the university and the students being entirely native performed by Nabavi can be considered. In the study conducted by Sadeqyan et al in Hamedan medical sciences university also the prevalence rate was 33.5% which is lower than what we found [15]. One reason behind such great discrepancies can be the study and the test tools and instruments used in these two studies for surveying the psychological health. Tavakkolizadeh and Khodadadi also reported psychological disorders prevalence in Genabad medical sciences university students as 31.6% [7], which is lower than the rate calculated in our study, the possible reason for which can be the differences in the study populations since in the study conducted by Tavakkolizadeh the study was performed only on the new comers. In the study performed by Jahani et al on Qazvin medical sciences university students the psychological disorders prevalence rate was reported to be 69.3% [1] which is really higher than the prevalence rate reported in our study but it is worth mentioning that their study was conducted on the first year and the last year students and by making use of SCL-90-R questionnaire. In a study performed by Oner on Turkish students [16] the prevalence rate (56.8%) was higher than the rate obtained in our study from among the reasons behind which one can refer to the students being older and the education years of more than four in respect to our study. The study conducted by Ku et al on the medical students of Singapore universities [17] also reported the prevalence rate of 57% which is higher than the rate obtained in the present study.

The results of the present study indicated that the psychological disorders prevalence rate in female students is higher than the male ones and there is a significant difference between the boy and girl students' psychological health scores and from this perspective the present study findings conform to the studies done by Mckee and McDonald [19], Masuda et al [20], but this study results are not consistent with what was found out by Omidian [21] and Tavakkolizadeh [7]. The low level of the girls' psychological health in comparison to the boys may be interpreted in this way that the girls are more susceptible to stressor factors because of their physiological characteristics and their gender specific roles in social functions and interpersonal relationships. Of course, the high rate of the psychological diseases in female gender in comparison to males has also been confirmed in the general public population and there are many studies both inside and outside our country verifying this issue [13, 22, 23]. Also, in the present study there was a significant difference between native and nonnative students' scores. These results conform to the results obtained by Dadkhah et al [8], Sadeqi et al [24]. But, the results obtained in the present study are not consistent with the results obtained by Bakhshipoor et al [25] and Mehri et al [13] and some of the reasons for this inconsistency can be that the students were all freshmen in these two recent studies and they had less

of a dormitory life. Anyhow, entering the university for non local students is accompanied by being distant from the family and friends and relatives and it is implicitly suggestive of readaptation to the resulting variations in this new life which is of a great impact on their psychological health.

The studies have shown that schooling in an unfavorable field of study can cause discomfort and unhappiness and create the feeling of failure and negatively influence the individuals [13]. The results of the present study indicated that the amount of interest one person has for a special field of study can affect his or her psychological health that is to say that the students having more interest in their field of study enjoy higher psychological health. These results conform to the results obtained by Baqeri Yazdi [26], and Dadkhah [8]. This result is suggestive of the necessity and the importance of the existence of centers for offering field of study selection services to the youngsters before their entrance to the university. Also, it is worthwhile that the families become trained and informed regarding this important issue and respect their children's interests and choices for continuing their education in whatever the field they desire. In the present study there was not seen significant difference among the students' psychological health scores based on marital status and employment variables which is consistent with the results obtained by Karami et al [27] and also the study performed by Nabavi [14] and Farahbakhsh et al [28], but the results obtained in the present study does not conform to the results obtained by Tavakkoli et al [13].

CONCLUSION

According to the results obtained by the recent study it can be concluded that some of Zahedan medical sciences university students have lower levels of psychological health and according to the importance and the standpoint that the medical sciences have in the social health and the sensitivity that exists regarding this issue it is necessary that the authorities and officials take measures for these students entrance to such fields of study and once they are part of it there should be room for taking serious and appropriate steps and making proper decisions. It is clear that making advisory centers more active and dynamic in the universities plays a significant role regarding the issue proposed by the present study. University consultative centers can enhance students' psychological health through offering intervening psychological services in fields such as teaching skills for specimen problem-solving skills, effective opposition, self-awareness, and so many other things.

Acknowledgement

This study was the result of a student research project approved at Zahedan University of Medical Sciences. Hereby, we express our deep gratitude to those students who participated and collaborated in this study and Research authorities of Zahedan University of Medical Sciences who helped us in the process of data collection and financial support.

REFERENCES

- [1] Jahani Hashemi H, Rahimzadeh Mirmahalleh S, Ghafelehbashy H, Sarichloo ME. *Journal of Qazvin Univ. of Med.* **2008**; 12(2):41-50
- [2] Shirbim Z, Sodani M, Shafieabadi A. *J Andishehva Raftar* **2009**; 2 (8):7-18
- [3] Omigbodun OO, Odukogbe AT, Omigbodun AO, Yusuf OB, Bella TT, Olayemi O. *Soc Psychiatry Psychiatr Epidemiol.* **2006** May; 41(5): 415-21.
- [4] Ybrandt, Helene and Kerstin Armelius . *School Psychology International*, **2010**; 31(2):146-163.
- [5] Mosher, Catherine E. and Sharon Danoff-Burg. *Journal of Health Psychology*, **2010**; 2(1):1-9.
- [6] Lapsley DL. *psychology*. **1989** ;36 (2):286-294
- [7] Tavakolizadeh J and Khodadadi Z. *GMUHS Journal*. **2010**; 16, (3):45-53.
- [8] Dadkhah B, Mohamadi M, Mozafari N. *Journal of Ardabil university of medical sciences* **2006**;6(1):31-36
- [9] Ahmadi H, Marzban M. *Quarterly of sociology* **2012**; 1(1):15-22.
- [10] Kjeldstadli K, Tyssen R, Finset A, Hem E, Gude T, Gronvold NT, Ekeberg O, Vaglum P. *BMC Med Educ.* **2006**; 19(6):48.
- [11] Liod G, Gartrell NK. Psychiatric symptoms in medical students. *omp psych* **1994**; 25: 552-565.
- [12] Liod G, Musser LA. *J NervMent Dis* **1989**; 177(2): 61-69.
- [13] Mehri A, Sedighy Some-Koochak Z. *Medical Science Journal of Islamic Azad Univesity - Tehran Medical Branch* **2012**; 21 (4):293-304

- [14] Nabavi S. Surveying mental health status of new students of medical branch, Islamic Azad University using MMPI inventory in 2006-2007 educational year. *Medical Science Journal of Islamic Azad University - Tehran Medical Branch* **2012**; 21 (4):292-297
- [15] Sadeghian E, Heidarian Pour A. *HAYAT quarterly* **2009**;15(1):71-80
- [16] Uner S, Ozcebe H, Telatar TG, Tezcan S. *Turk J Med Sci*, **2008**; 38(1):25-32.
- [17] Ko SM, KuaEH, Fones CS. *Singapore Med J* **1999**; 40(10): 627-30.
- [18] Ansari H, Bahrami L, Akbarzadeh L, Bakhshani NM, *Zahedan Journal of research in medical science* **2007**, 9(4): 9-15
- [19] McKay, R., & McDonald, R. *Australasian Psychiatry*, **2008**;16(6), 428-432.
- [20] Masuda, A., Price, M., Anderson, P. L., Schmertz, S. K., & Calamaras, M. R. *Journal of Social and Clinical Psychology*, **2009**; 28, 1244-1262.
- [21] Omidian M. *Research in Clinical Psychology and Counselings*, **2009**;10(101):75-82.
- [22] Li, Ying and sato, Yasuto. *School Health*, **2008**; 4: 9 – 15
- [23] Shariati M, Kaffashi A, Ghaleh Bandy MF, Fateh A, Ebadi M. *Journal of the Iranian Institute for Health Sciences Research*. **2002**; 3(1): 29-37.
- [24] SadeghiMovahed F, Narimani M, RajabiS. *J Ardabil University of Medical Sciences* **2008**; 8 (3): 261-9.
- [25] Bakhshipourroudsari A, Peyravi H, Abedian A. *TheQuarterly Journal of Fundamentals of Mental Health*. **2005**; 27-28(7): 145-152.
- [26] BagheriYazdi SA, Bolhari J, Peyravi H. *Iranian Journal of Psychiatry and Clinical Psychology (AndeeshehVaRaftar)*. **1995**; 4(1): 30-39.
- [27] Karami S, Piraste A. *Sci J Zanjan med sciUni* **2002**; 35: 66-73.
- [28] Farahbakhsh S, Gholamrezaei S, Nikpay I. *The Quarterly Journal of Fundamentals of Mental Health*, **2007**; 8(33 & 34): 61-66.