Original Article

Examining Social Health and Its Related Factors among Iranian Medical students

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ABSTRACT

Introduction: Given the importance of providing social health for students, this study was conducted to investigate the social health and its related factors among Iranian students of medical sciences.
Methods: This descriptive and cross-sectional study was carried out in 2016. The population of the study included students of Mazandaran University of Medical Sciences (Sari, Iran). Using random sampling, we selected 352 students. Eligible students for the study were those who (i) consented to participate, (ii) agreed to participate fully, and (iii) had no physical illnesses. Exclusion from the study was due to any event that prevented them from participating in the study (e.g., the death of a family member). Then, standardized questionnaire of "Keyes's Social Well-being" and demographic questionnaire were used in this study to collect data. The data were tabulated and analyzed by means of SPSS 13.0 for Windows (SPSS Inc., Chicago, IL, USA), which was used to calculate descriptive and inferential (Two-way ANOVA) indices.
Results: In this study, 202 women and 150 men participated with the mean age of 23.14 (2.41). The mean score of social health of students was average 92.99 (7.54). About 75.4% of participants had average levels of social health. Maximum and minimum levels of social health were related to contribution 20.64 (3.65) and social coherence 15.86 (2.12) respectively. There were no differences in the overall social health score of the students in terms of gender; however, regarding marital status, place of residence, father's education, and mother's education, there was a significant difference among students.
Conclusion: Given the importance of social health, it is necessary to have proper planning such as providing for the requirements of stable marriages for students, good place of residence to improve the quality of life and enhance their satisfaction with it.

Introduction

Health is known to lie on three pillars: physical health, mental health and social health. Among these three, social health is a concept that has gained importance and been discussed not only in academic circles, but also in policy-making and executive spheres.[1-4] Generally speaking, three different approaches have been proposed regarding social health in national and international studies. First, social health is an aspect of the individual's health besides their physical and mental health; theorists such as Blas et al., Mark et al., and Weare are among those who hold such an attitude towards social health.[5-7]

Second, the group is the people who consider social health as healthful social conditions, and the third group is theorists such as Miringoff et al., and Graham who consider social health as a healthy society.[8,9] Social health is defined as the assessment and understanding individuals and his functioning in society and the quality of his relationships with other people and social groups where he is a member. Accordingly, a five-factor model was proposed in which solidarity health-indicators.[10,11] In fact, what causes higher education to try to create coordination between the new needs and university are great industrial, economic, social, and cultural developments at national, regional, and global levels.[12] Social health indicators give us quantitative information about a variety of situations or not.

Obviously, in this sort of planning, attention to social health of students as the main axis of development is essential.[13] Besides educating students and preparing them to take on professional responsibilities, Universities should also take measures for healthy emotional and social nurturing of them in harmony with cultural, social, familial, religious, historical beliefs and values, so that through the realization of the concept of individual autonomy they could perfect their identities formed in prior periods.[14,15] Unfortunately, in recent years, emotional, mental, and social problems have had an ascending and worrying trend among students, and abnormal phenomena such as suicidal tendencies, substance abuse, and academic failure have been serious obstacles to the development of the university.[16,17] So, in order to deal with these problems, scientific and accurate understanding of problems based on studies of experts and scholars is inevitable. The limitations of student life, such as being away from family, dealing with new social and physical environments, complying with the values and expectations of the university are among important issues for further research in the higher education system.[18,19] Social health provides us with health care system.

Yazdanpanah conducted a study to assess social

health of students, which showed no significant relationship between social health of students and their mothers' remarry, marital status, and their gender.[20] Rezaie et al., showed that there is a significant relationship between communication skills, religious beliefs, socio-economic status, and social health, but found no strong relationship between the way of spending leisure time and social health.[21] In a study on social flourishing, Babapour et al., showed that psychologically healthy people have hopeful perspectives on issues related to social conditions and their future, whereas unhealthy people are in despair about these issues.[22] Viner et al., married ones have higher social health than single ones.[23] Moreover, since measuring the level of this relationship is of great importance in understanding social health of medical sciences students, this study was conducted to investigate the related factors of social health among Iranian medical sciences students.

Materials and methods

This descriptive and cross-sectional study was done in 2016. The population of the study included students of Mazandaran University of Medical Sciences (Sari, Iran). From all colleges of this university, only central colleges (in Sari city) were chosen. This university has about 4500 students. Through random sampling, 352 students were selected as sample of the study based on Krejcie and Morgan's table. In this study, we tried to observe statistical fit in proportional distribution of population according to gender separation and based on total number of students of Schools of Medicine, Pharmacy, Dental, Health, Para medicine, Nursing and Midwifery.

Eligible criteria's and procedures The eligible students for the study were those (i) being satisfied, (ii) agreeing to participate fully and (iii) having no physical illnesses. Exclusion from the study was due to any event that prevented their participation in the study (e.g., the death of a family member). No participants were excluded from study. Students were invited to participate in the study during class meetings and were assured that taking the survey would not affect their grades in anyway. Data were collected in a single session, using a survey administered in a paper-and-pencil format. Participants provided informed consent and dropped completed questionnaires through a slit into an enclosed box.

Debriefing forms were given to participants as they exited the classroom (contents of this form included opinion of students about questions and study procedures and their recommendations). The institutional review board approved the research prior to implementation of the study.

Standardized questionnaire of "Keyes's Social Well-being" and demographic scale were used in this study to collect the data. Keyes's Social Well-being questionnaire (KSWBQ) was developed in 1998.[24] KSWBQ contains 5 main scales and 33 related items: 7 items for Social Integration, 7 items for Social Acceptance, 6 items for Social Contribution, 7 items for Social Coherence, and 6 items for Social Actualization.[25] Scores of the questionnaire is based on five-point Likert, and questions range from 1 to 5, strongly agree to strongly disagree. Accordingly, the possible range of the total score of questionnaire is 33-165.[25] Higher scores of the questionnaire reflect better social health. Based on available cut point, scores between 33-88, 89-143, and 144-165 reflect low, average, and high levels of social health respectively. Reliability (Cronbach's alpha = 0.78) and content validity study had been approved in the study by Babapour et al.[22] In the present study, survey of experts, and questions from previous tests were considered to ensure content validity of the questionnaire. Finally, the problems of the questionnaire were resolved through pilot implementation of 30 questionnaires at pre-test. Cronbach's alpha was used to the internal consistency of measuring scale, which was 0.85 indicating an acceptable reliability. Also Cronbach's alpha for all dimensions of this questionnaire were Social Integration (α = 0.871), Social Acceptance (α = 0.92), Social Contribution (α = 0.906), Social Coherence (α = 0.812), Social Actualization (α = 0.835). Thus, the validity and reliability of the questionnaire for Social Integration, Social Actualization, Social solidarity, Social Contribution, and Social Acceptance subscales were confirmed.

Ethical approval was obtained from the research ethics committee of the Research deputy of the associated University of medical sciences (Ethics code: IR.MAZUMS.REC.95.1744). All the participants received oral and written information about the aims of the study. It was made clear to them that their participation was voluntary and that all data would remain confidential. Research participants could not be personally identified and they were assured that participation would in no way affect their academic results.

The data were tabulated and analyzed by means of SPSS 13.0 for Windows (SPSS Inc., Chicago, IL, USA), which was used to calculate descriptive and inferential (Two-way ANOVA) indices. P-value<0.05 was considered statistically significant.

Results

In this study, 202 women and 150 men participated with mean age of 23.14 (SD= 2.41). Most of students (266) were single, living with their families (176). The mean social health score of students showed 92.99 (SD= 7.54), which was intermediate. About 75.4% of participants had average levels of social health. Also 15.8% and 8.74% of students had high and low levels of social health. Reviewing each of the five dimensions of social health shows that the `mean social integration of students is 15.86 (less than average), social acceptance 18.54 (average), social contribution 20.64 (higher than average), social actualization mean 18 (almost average), and finally, social coherence got 20.58 (very high). In table 1 scores of each dimension of social health based on schools type are shown.

Based on Table 2, we can conclude that there are no significant differences between male and female students in terms of overall social health score and all its indices (P>0.05). Also, there was a significant difference between students of different schools in social solidarity (P= 0.01),

social Actualization (P= 0.01), and overall social health score (P= 0.023). Also social solidarity in Dental school students and social actualization in students of Pharmacy school were more than those for other schools. However, no significant difference was observed regarding social acceptance, social contribution, and social coherence among students of different schools (P>0.05).

We can conclude that there are significant differences between married and single students in social solidarity (P=0.03), social contribution (P=0.04), social coherence (P=0.02) and overall social health score (P=0.02) which

happens to be less than (0.05). But there was no significant difference in social actualization and acceptance among married and single students (P>0.05). Finally, married students (mean= 93.89) obtained higher mean scores of social health than single students (mean 90.26). The study found a significant difference among students concerning residence in social solidarity (P=0.003), actualization (P<0.001), and total scores of social health (P=0.001).

Moreover, there was a significant difference between students based on parental education level in social solidarity (P=0.00), social contribution (P=0.01),

Table 1. Mean and standard deviation of indicator of social health of students

Faculty	Health	Nursing and midwifery	Para medicine	Medical	Pharmacy	Dental
Social health indicators	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Social solidarity	15.7 (3.03)	15.3 (3.23)	14.5 (2.8)	16.16 (3.7)	17 (4.6)	17.2 (5.57)
Social acceptance	18.1 (2.3)	18.4 (2.9)	18.66 (4.2)	18.28 (2.9)	18.15 (2.3)	20.75 (5.1)
Social contribution	19.5 (6.8)	19.98 (2.8)	20.01 (3.35)	19.35 (3.85)	19.5 (6.8)	20.12 (2.8)
Social Coherence	20.5 (3.6)	20.55 (4.4)	19.48 (3.96)	21.14 (3.95)	20.54 (3.6)	19.7 (2.7)
Social Actualization	19.4 (2.2)	18.44 (4.27)	17.58 (4.7)	18.3 (2.6)	21 (2.29)	19.2 (7.4)
Total score	93.55 (7.54)	91.60 (7.7)	90.25 (10.92)	93.26 (8.3)	98.6 (14.13)	94.93 (9.99)

Table 2. Related factors of social health in students

Variable	Mean Square	Effect size	P	F
Field of study				
Social solidarity	42.22	3.09	0.006	0.05
Social acceptance	16.70	11.6	0.14	0.027
Social contribution	7.20	0.44	0.89	0.008
Social coherence	24.90	1.60	0.13	0.028
Social actualization	37.00	2.80	0.01	0.048
Total score of social health	128.02	2.40	0.23	0.041
Sex				
Social solidarity	5.60	0.001	0.50	0.39
Social acceptance	0.07	0.00	0.93	0.007
Social contribution	7.28	0.05	0.18	1.78
Social coherence	25.3	0.05	0.20	1.63
Social actualization	2.32	0.00	0.67	0.174
Total score of social health	0.61	0.00	0.93	0.007
Marital status				
Social solidarity	41.33	0.02	0.03	2.9
Social acceptance	13.57	0.011	0.27	1.2
Social contribution	35.1	0.019	0.04	1.2
Social coherence	17.5	0.11	0.02	1.1
Social actualization	13.5	0.009	0.38	1.02
Total score of social health	22.3	0.12	0.02	0.25
Residence				
Social solidarity	63.29	0.038	0.003	4.62
Social acceptance	38.49	0.031	0.011	3.7
Social contribution	22.55	0.012	0.242	1.4
Social coherence	26.31	0.015	0.165	1.7
Social actualization	72.22	0.047	0.001	5.6
Total score of social health	418.4	0.04	0.002	4.38
Father's education				
Social solidarity	131.57	0.08	0.00	10.04
Social acceptance	0.85	0.01	0.90	0.08
Social contribution	53.9	0.029	0.01	3.40
Social coherence	24.3	0.013	0.194	1.50
Social actualization	59.6	0.038	0.003	4.60
Total score of social health	243.4	0.024	0.04	2.70
Mother's education				
Social solidarity	52.3	0.032	0.01	3.80
Social acceptance	18.44	0.015	0.154	1.70
Social contribution	87.8	0.046	0.001	5.60
Social coherence	34.11	0.019	0.08	2.20
Social actualization	20.02	0.013	0.211	1.50
Total score of social health	253.3	0.025	0.034	2.90

actualization (P=0.003) and overall score of social health (P=0.04). Social actualization of students whose parents had bachelor of science (BSc) and master of sciences (MSc) (mean= 19.9) and PhD (mean= 19.1) was significantly different from social actualization of students whose parents had high school diploma (mean= 17.2) and less than diploma (mean= 18.25) (P<0.05). At the level of coherence and acceptance there was no difference among students regarding parental education (P>0.05).

The overall social health score of students whose parents had PhD (mean= 95.17) and BSc and MSc (mean= 94.56) was significantly different from students whose parents had less than diploma (mean= 88.8) and high school diploma (mean= 90.25).

Discussion

The obtained results indicate that age, field of study, place of residence, and parental education were all related to social health of Iranian students. Social health of females and males was equal, that is, there were no significant differences between them regarding gender.

The study by Lee had showed a significant relationship between gender and social health. Social solidarity, contribution, and actualization showed significant differences in male and female students. Perhaps this is due to fewer social restrictions imposed on men compared to women, which enables boys to be present in different areas without concern and thus consider themselves as important members of society and progress. Moreover, social actualization of female students is more than males; it means females are more hopeful about the future and the development of society, which is not consistent with our study.[26] The results of this study showed that social solidarity among dental school students is more than that of other schools, and social actualization of pharmacy school students is more than that of other schools. However, there was no significant difference in acceptance, contribution, and coherence among students of different schools. The mean of overall social health was the highest at Pharmacy school and the lowest in para- medicine school was. The results of this study in assessing the relationship between social health and marital status showed that social solidarity among single students was more than that among married students, but social contribution and coherence of married students were more than single students'. However, there was no difference in acceptance and actualization between married and single students. Finally, the mean of overall score of social health of married students is higher than that of single students' mean. The findings of the study by Lee show that married students have higher social health than single students do,[26] which is consistent with our study. The relationship between marital status and mental health has been approved in many studies because it seems that marriage creates sort of positive attitude towards public affairs, thus boosting the social health by satisfying several needs, creating a spirit of commitment, and creating a network of stable relations.[27-29] On the other hand, teaching (in house and school) space provides the stage for the actualization and development of talents in different social, economic, and cultural fields in students and fosters constructive force and innovation in them, and thus boosts mental and social health.[30] Perhaps that is why social health of students living with their families is less than the solidarity of the students living in rented houses.

Actualization and social solidarity of dormitory students are more than those of the students living in rented houses and students who live with their families. However, there was no difference in acceptance, coherence, and social contribution among students in terms of place of residence. The overall score of social health of dormitory students is better than that of the students who were with their families or in rented houses.

Social solidarity among students whose parents had PhD and higher education was significantly higher than that of the others. The present study suffered from certain limitations including 1- inability to control the emotions and cultural differences of the participants, 2- possible carelessness of students during completion of the questionnaire, and 3- low sample size. These limitations might have limited the generalizability of the results. So it is recommended that more research be done to assess wider contents of this issue.

Conclusion

Based on the results, social health of medical sciences students was evaluated as average. Although social health overall score showed no relationship with gender, it showed significant relationship with marital status, place of residence, field of study, and educational level of parents. The study showed the importance of marriage and parental education level in promotion of social health. This means that with increase in parental educational level, social health of students increases, and married students have higher social heath status than singles. Thus, considering the importance of social health, it is necessary to have proper planning such as providing facilities of stable marriage for students to improve the quality of life and their satisfaction with it.

Acknowledgments

Ethical issues

None to be declared.

Conflict of interest

The authors declare no conflict of interest in this study.

References

1. Amini Rarani M, Rafiye H, Khedmati Morasae E. Social health status in Iran: an empirical study. Iran J Public Health 2013; 42 (2): 206-14.
2. Ruger JP. Health and social justice. Lancet 2004; 364 (9439):1075-80. doi: 10.1016/S0140-6736(04)17064-5.
3. Darabinia M, Heidari Gorji AM, Gholami S. Self-care study in the Iranian medical students based on Islamic thought. J Nurs Educ Pract 2017; 7 (9). doi: 10.5430/jnep.v7n9p85.
4. Darabinia M, Heidari Gorji AM, Afzali MA. The effect of the Quran recitation on mental health of the Iranian medical staff. Journal of Nursing Education and Practice 2017; 7 (11): 30-6. doi: 10.5430/jnep.v7n11p30
5. Blas E, Sivasankara Kurup A. Equity, social determinants and public health programmes. Genava: World Health Organization 2010.
6. Mark Van O, Shekhar S, Benedetto S. Mental and social health during and after acute emergencies: emerging consensus? Bulletin of the World Health Organization 2005; 83 (1): 71-5.
7. Weare K. Promoting mental, emotional, and social health: A whole school approach. 1st ed. United Kingdom: Routledge 2002.
8. Miringoff M, Miringoff M-L. The social health of the nation: How America is really doing. 1st ed. Oxford: Oxford University Press. 1999.
9. Graham H. Understanding health inequalities. 1st ed. UK; McGraw-Hill Education. 2009.
10. Ashlaghi H, Mahmud S, Gorji H, Morad A, Morteza D, Mansour R. Impact of suggestions system on the employee performance in Mazandaran university of medical sciences. International Journal of Humanities and Cultural Studies 2016; 1 (1): 1370-83.
11. Darabinia M, Gholami S, Heidari Gorji AM. Evaluation of Islamic spiritual self-care (musharatah) in the students of Mazandaran University of medical sciences. Religion and Health 2017; 4 (1): 12-20. (Persian)
12. Braveman P, Egerter S, Williams DR. The social determinants of health: coming of age. Annu Rev Public Health 2011; 32: 381-98. doi: 10.1146/annurev-publhealth-031210-101218.
13. Hefner J, Eisenberg D. Social support and mental health among college students. Am J Orthopsychiatry 2009; 79 (4): 491-9. doi: 10.1037/a0016918.
14. Zaleski EH, Levey-Thors C, Schiaffino KM. Coping mechanisms, stress, social support, and health problems in college students. Appl Dev Sci 1998; 2 (3): 127-37. doi: 10.1207/s1532480xads0203_2.
15. Vereshchagina AV, Gafiatulina NK, Kumykov AM, Stepanov OV, Samygin SI. Gender Analysis of Social Health of Students. Eur Stud Rev 2015; 7 (7): 223. doi:

10.5539/res.v7n7p223.
16. Facundes VLD, Ludermir AB. Common mental disorders among health care students. Rev Bras Psiquiatr 2005; 27 (3): 194-200. doi: 10.1590/S1516-44462005000300007.
17. Roberts R, Golding J, Towell T, Reid S, Woodford S, Vetere A, et al. Mental and physical health in students: the role of economic circumstances. Br J Health Psychol 2000; 5 (3): 289-97. doi: 10.1348/135910700168928.
18. Heidari Gorji AM, Darabinia M, Ranjbar M. Relationship between emotional intelligence and job motivation among faculty staff in Mazandaran University of medical sciences, iran. Iran J Psychiatry Behav Sci 2017; 11 (2): e8065. doi: 10.5812/ijpbs.8065.
19. Zamankhani F, Abachizadeh K, Omidnia S, Abadi A, Hiedarnia MA. Social health situation analysis of all provinces of Islamic republic of Iran. Community Health 2016; 3 (3):181-9.
20. Yazdanpanah L, Nikvarz T. Relationship between Social factors and social health among students of Shahid Bahonar University of Kerman. Journal of Applied Sociology (1735-000X) 2015; 59 (3).
21. Rezaie R, Hosseini SJ, Valaie N. Communication skills of doctors and their attitudes in Shiraz. Feyz 2001; 4 (4):19-26.
22. Babapour Kheiroddin J, Toosi F, Hekmati I. Study of determinant factors role of students' social well-being. Journal of Psychology 2010; 16 (4):1-9.
23. viner RM, Ozer EM, Denny S, Marmot M, Resnick M, Fatusi A, et al. Adolescence and the social determinants of health. Lancet 2012; 379 (9826): 1641-52. doi: 10.1016/s0140-6736 (12)60149-4.
24. keyes clm. Social well-being. Social psychology quarterly. 1998; 61 (2): 121-40.
25. Mozaffari N, Nayeri ND, Dadkhah B. Social well-being of a sample of Iranian nurses: a descriptive-analytic study. arXiv preprint ar Xiv:1404.2158. 2014.
26. Lee JS, Koeske GF, Sales E. Social support buffering of acculturative stress: A study of mental health symptoms among Korean international students. International Journal of Intercultural Relations 2004; 28 (5): 399-414.
27. Horwitz AV, Scheid TL, editors. A handbook for the study of mental health: Social contexts, theories, and systems.1st ed. Cambridge: Cambridge University Press; 1999.
28. Brown SL, Bulanda JR, Lee GR. The significance of nonmarital cohabitation: marital status and mental health benefits among middle-aged and older adults. J Gerontol B Psychol Sci Soc Sci 2005; 60 (1): s21-s9.
29. Umberson D. Gender, Marital status and the social control of health behavior. Soc Sci Med 1992; 34 (8): 907-17.
30. Gili M, Roca M, Basu S, Mckee M, Stuckler D. The mental health risks of economic crisis in spain: evidence from primary care centers, 2006 and 2010. Eur J Public Health 2013; 23 (1): 103-8. doi: 10.1093/eurpub/cks035.