Socioeconomic Status and Dimensions of Mental Health with Suicidal Ideations among Students

Ali Reza Shafiee-Kandjani [1], Mahasti Alizadeh [2], Afsaneh Nasirzadehghan [3],
Leila Kehtary-Harzang [4], Maryam Vahedi [5], Mohsen Poursadeqiyan [6],
*Alireza Karimpour Vazifehkhorani [4]

1. *Social Determinants of Health Research Center, Tabriz University of Medical Sciences, Tabriz, Iran*
2. *Department of Social Medicine, Tabriz University of Medical Sciences, Tabriz, Iran*
3. *Department of Psychology, Tabriz Branch, Islamic Azad University, Tabriz, Iran*
4. *Faculty of Psychology and Educational Sciences, University of Tabriz, Tabriz, Iran*
5. *Department of Psychology, Karaj Branch, Islamic Azad University, Karaj, Iran*
6. *Department of Ergonomics, Pediatric Neurorehabilitation Research Center, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran*

*Corresponding Author: Email: a.karimpour92@gmail.com

Dear Editor-in-Chief

Suicide is considered as a deliberate behavior in which several factors play important roles. Individual mental status as well as social and economic performance among university students may have potential impact on suicidality (1). University students are at the risk of developing mental disorders such as depression with suicidal ideations (2). They are in the most active period of their lives seeking for more gratifications but they could face with several barriers such as separation from belongings, losing family supports, living in a dormitory, experiencing economic problems, being forced to get autonomy, having learning problems, and uncertain future of work may make them feel unhappy (3).

One of the causes of suicide in developing countries is stressful social events (4, 5). Suicidal behavior can be considered as the result of a complex interaction of psychosocial and familial factors. Social changes that may be in relation with suicide include family instability, marital conflicts

divorce, poverty and unemployment. University students are the potential human resources of a country by whom the future of a society will be constructed in the modern era. More healthy students will more likely get achievements (6).

Therefore, the purpose of the study was to investigate the association between socioeconomic status and dimensions of mental health with suicidal ideations among university students.

The methods of this study were a descriptive and correlational one. Overall, 900 people were enrolled from the University of Tabriz Students in 2016-2017.

The study was approved by the regional Ethics Committee under the code number of IR. TBZMED. REC. 1396. 1260.

Beck Scale for Suicide Ideation (BSSI), Symptom Checklist-90-Revised (SCL-90-R) and socioeconomic status scale of Ghodratnama and the colleagues were used. The correlation and multiple regression methods were used to analyze the re-

Available at: http://ijph.tums.ac.ir

search data through SPSS (Chicago, IL, USA) version 23.

Mental health and socioeconomic status had a significant negative association with suicidal ideations. Correlation results showed that depression with r = 0.514 and *P* <0.01 had the highest correlation with suicidal ideations. After that, Psychoticism with r = 0.478, *P* <0.01 and obsessive-compulsive with r = 0.463 and *P* <0.01 were placed respectively. The somatization was also correlated with suicidal ideations while r = 0.231 and *P* <0.05. Among the components of the so-

cioeconomic status, income with r = -0.401 and *P* <0.01 had the highest correlation coefficient and then the economic class component with r = -0.321 and *P* <0.05 rests in the second place (Table 1). The results of regression analysis indicated that the mental health variable predicted suicide in merely 58.6% of people. With the addition of the socioeconomic status variable in the equation, both variables predicted an average of 71.6% of the overall suicidal ideations among individuals (Fig. 1).

Table 1: Association between variables

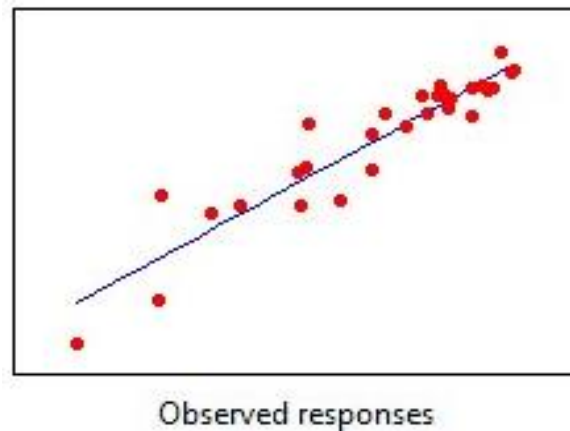| SCL-90-R	R	P	SCL-90-R	R	P	SCL-90-R	R	P	SES components	R	P
somatization	0.242**	0.05	Depression	0.514**	0.01	Phobic Anxiety	0.110	0.9	Income	-0.401*	0.01
Obsessive-Compulsive	0.463*	0.01	Anxiety	0.127	0.09	Paranoid Ideation	0.98	0.14	Economic class	-0.321**	0.05
Interpersonal sensitivity	0.95	0.13	Hostility	0.109	0.11	Psychoticism	0.478*	0.01	Housing	-0.119	0.07

P * (0.01), ** (0.05)

Fig. 1: Plot of observed response versus fitted responses for regression model
R^2= 71.8%

As a result, mental health difficulties and socioeconomic problems may have a negative impact on developing suicidal ideations (7). Therefore, it is highly recommended to consider students'

mental health and social/ financial problems by educational managers responsible in the universities; a mission which would be included in curriculum plans.

Acknowledgements

Conflict of interest

The authors declare that there is no conflict of interest.

References

1. Rotenstein LS, Ramos MA, Torre M, et al (2016). Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: a systematic review and meta-analysis. *JAMA*, 316(21):2214-36.
2. Cederbaum JA, Gilreath TD, Benbenishty R, et al (2014). Well-being and suicidal ideation of secondary school students from military families. *J Adolesc Health*, 54(6):672-7.
3. Cheng JK, Fancher TL, Ratanasen M, Conner KR, Duberstein PR, Sue S, Takeuchi D (2010). Lifetime suicidal ideation and suicide attempts in Asian Americans. *Asian Am J Psychol*, 1(1):18-30.
4. Perez-Brumer A, Day JK, Russell ST, Hatzenbuehler ML (2017). Prevalence and correlates of suicidal ideation among transgender youth in California: Findings from a representative, population-based sample of high school students. *J Am Acad Child Adolesc Psychiatry*, 56(9):739-46.
5. Chien WT, Lam CK, Ng BF (2015). Predictors of levels of functioning among C hinese people with severe mental illness: a 12-month prospective cohort study. J Clin Nurs, 24(13-14):1860-73.
6. Morrow CB, Epling JW, Novick LF (2003). A user's guide to teaching the C-POP series. *Am J Prev Med*, 24(4):116-7.
7. O'Connor RC, Nock MK (2014). The psychology of suicidal behaviour. Lancet Psychiatry, 1(1):73-85.

Available at: http://ijph.tums.ac.ir