

# The relationship between lifestyle and general health of students at Islamic Azad University of Bandar Abbas

Fereshteh Mazhariadzad<sup>1</sup> Nasibeh Roozbeh<sup>2</sup>

Instructor Department of Nursing<sup>1</sup>, Islamic Azad University, Bandar Abbas Branch, Bandar Abbas, Iran. PhD Student of Reproductive Health<sup>2</sup>, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

(Received 25 Feb, 2014)

Accepted 9 Jun, 2014)

## Original Article

### Abstract

**Introduction:** There is certainly no doubt that health is one of the most important aspects of human life which as an essential condition plays social roles. The concept of lifestyle relies on the notion that individuals usually exhibit a recognizable model of behavior in their daily life. The study aimed to investigate the relationship between lifestyle and general health of students at Islamic Azad University of Bandar Abbas.

**Methods:** This is a descriptive correlational study which included 764 students at Islamic Azad University of Bandar Abbas with no history of mental health disorders, chronic illness and disability before admission to the university. In this study, three questionnaires were used for the collection of data.

**Results:** Most of students were single. The frequency of local students (from Bandar Abbas) was more than non-local ones. Most of them were financially dependent. There was a significant relationship between sex, marital status, state of residency, and the economic situation from the view point of general health ( $P < 0.001$ ). In terms of general health, there found a significant relationship between socioeconomic status, sport, smoking, nutrition, the principles of safety and stress. ( $P < 0.05$ )

**Conclusion:** This study shows the necessity for the attention and emphasis on the role of increased awareness of students about improvement of lifestyle and proper behavioral models. Through the improvement of lifestyle, outbreak of diseases may be prevented. Finally, this factor should be considered as a preventive factor.

*Correspondence:*  
Fereshteh Mazhariadzad,  
MSc.  
Nursing Department Islamic  
Azad University,  
Bandar Abbas, Iran  
Tel: +98 9133425256  
Email:  
fmazhari@iauba.ac.ir

**Key words:** Lifestyle – Public Health - Students

**Citation:** Mazhariadzad F, Roozbeh N. The relationship between lifestyle and general health of students at Islamic Azad University of Bandar Abbas. *Hormozgan Medical Journal* 2014;18(6):461-467.

### Introduction:

Health, either individually or socially - is undoubtedly one of the most important issues of human life. In other words, health is an essential condition enabling people to play their roles in the

society. Individuals can play their roles effectively if both they themselves and the society find them healthy (1). Health professionals believe that lifestyle is one of the most important factors affecting health. World Health Organization (WHO) believes that the risk factors of the most

common causes of death may be controlled (2). Diseases caused by lifestyle are preventable and modifiable on condition that habits and behaviors resulting in the diseases are modified (3). Individuals are responsible for their behavioral patterns choice of the lifestyles and protecting their health. In this way, they strive to protect their health and prevent diseases (4). Most of the health issues including obesity, cardiovascular diseases, neoplasms and addiction which are common in developing countries are associated with changes of lifestyle of the people in a society (5).

Students are talented and selected group of people in societies that build the future of their countries. Therefore, their health levels and lifestyles have a vital role in their learning, improvement of scientific awareness and educational success. Borhani et al suggested that there was a significant reverse relationship between body mass index (BMI) and the score of lifestyle (3).

Recent studies reported that 46% of male and 64% of female students had anxiety, and 12% of male and 15% of female students suffered from depression (7). Sadeghian et al indicated that about 1.3 of students were prone to mental disorders. They reported the most common disorders as depression, hypochondriasis and anxiety (8).

University students make up a remarkable portion of young population of the country. They are at the stage of learning and preparing to attend the social life. The efforts for the improvement of health through enabling the students for the lifestyle change should be regulated in the direction of personal, social and environmental change affecting the behavior and lifestyle (6,7). Since being admitted at university admission causes major changes in the personal, familial and social life, so this is a critical stage. Such situation is often accompanied by stress and concerns which influence the individual's lifestyle (7). Since there is no earlier study addressing the relationship between lifestyle and general health of students in Bandar Abbas, the present study has attempted to investigate this relationship.

## Methods:

The present research is a descriptive correlational study which was carried out to investigate the relationship between lifestyle and general health of students at Islamic Azad University of Bandar Abbas in 2012. The population of the study included all those students studying at different levels of education (Associate Degree, BSc, BA, MSc, MA) with no history of mental health disorders, chronic illness and disability before being admitted to the university.

The total samples of the study included 764 students (370 female and 394 male). The method used for sample collection of the present study data was convenience method. To do this, after informing all students about the study purpose, interested students in participation referred to the location advised earlier for filling out the required questionnaires. The researchers waited until the number of completed questionnaires reached the required sample-size. The students of the first semester were excluded from the study.

In the present study, three questionnaires were used for the collection of required information. The first questionnaire was related to personal characteristics of the students. The second questionnaire was related to lifestyle in 5 dimensions (Nutrition, Exercise and physical activity, Smoking, Stress Control and Safety). It was taken from the tools for the assessment of lifestyle (9) and health institute (10), with some modifications by the researchers. Like the questionnaire of health institute, the scoring style of the questionnaire based on Likert scale. There were 5 questions with total score of 20 in the domain of Exercise and physical activity. Scoring from 0 to 6 considered as undesirable, from 7 to 13 as somewhat desirable, and from 14 to 20 as desirable. There were 9 questions with total score of 36 in the domain of nutrition. Scoring from 0 to 11 considered as undesirable, from 12 to 19 as somewhat desirable, and from 20 to 32 as desirable. There were 7 questions with total score of 28 in the domain of smoking. Scoring from 0 to 9 was considered as undesirable, from 10 to 18 as somewhat desirable, and from 19 to 28 as desirable. The score of lifestyle in the dimension of safety considered based on percentage in which 0-33.99% was undesirable, 34-67.99% was

somewhat desirable and 68-100% considered as desirable. Lifestyle in the dimension of stress control contained 10 questions with 40 scores where 0-12 represented undesirable, 13-25 somewhat desirable and 26 to 40 as desirable. The 3<sup>rd</sup> questionnaire was a 28-item general health questionnaire formerly used by Goldberg in 1972 (11). The scoring scale was 4-point Likert scale (0, 1, 2, 3). The maximum score is 84 in this method. After scoring the items of the questionnaire, the total score was calculated by sum of the scores. General health score of 0-27, 28-55 and 56-84 respectively considered as desirable, somewhat desirable and undesirable respectively. Scientific validity of the tools used in the present research was assessed through content validity. Chronbach's alpha was  $\alpha=0.6$ . The validity of general health questionnaire (GHQ-28) was surveyed (11) and the internal consistency coefficient was estimated by Chronbach's alpha method (0.92) (12). Several studies reported the validity coefficients for the four dimensions of the questionnaire respectively were 0.86, 0.85, 0.72 and 0.82 respectively (13).

To collect the required data, the researcher after selecting the subjects of the study adequately briefed the objectives of the study after selecting the subjects of the study. Then those interested in participation filled out the questionnaires. Data was analyzed by SPSS 18 using required statistical tests.

## Results:

The age range of the students participating in the study was from 23 to 28 years old. Table 1 presents frequency based on the variables including marital status, place of residence, economic status. Most of the students were unmarried. The frequency of the students who were from Bandar Abbas (local) was more than non-local ones. From the view point of financial support they were dependent.

The results regarding the first objective of the study - to determine the general health of the students by gender, marital status, place of residence and economic status - are presented in table 2.

**Table 1. The frequency of the students by marital status, place of residence and economic status**

Population		Marital status		Place of residence		Economic status	
		Unmarried (%)	Married (%)	Local (%)	Non-local (%)	Dependent (%)	Independent
Male	394	82.2	17.8	76.6	23.4	57.9	42.1
Female	370	77.3	22.7	68.1	31.9	67.6	32.4
Total	764	79.8	20.2	72.5	27.5	62.6	37.4

**Table 2. The relationship of the variables including gender, marital status, place of residence and economic status with general health**

Variable		Desirable General Health		Somewhat Desirable General Health		Undesirable General Health		P-value
		Frequency	%	Frequency	%	Frequency	%	
Gender	Male	214	54.3	52	13.2	128	32.5	P<0.001
	Female	188	50.8	92	24.9	90	24.3	
Marital status	Married	146	94.8	-	-	8	5.2	P<0.001
	Unmarried	256	33.5	144	23.6	210	34.4	
Place of Residence	Non-dormitory	554	71.1	80	14.4	80	14.4	P=0.000
	Dormitory	8	3.8	64	30.5	138	65.7	
Economic status	Dependent	116	24.3	144	30.1	218	45.6	P<0.001
	Independent	286	100	-	-	-	-	

The results of the study regarding the relationship between lifestyle and general health showed that 16.6% of the students had desirable

condition, 33.2% and 50.2% of them had somewhat desirable and undesirable condition from exercise and physical activity dimension viewpoint

respectively. The results regarding nutrition dimension showed 52.6%, 18.8% and 28.5% with desirable, somewhat desirable and undesirable condition, respectively. The results regarding the dimension of smoking indicated 55.5%, 19.9% and 24.6% with desirable, somewhat desirable and undesirable condition, respectively. The results regarding the dimension of safety showed 67.6%, 29.5% and 2.9% with desirable, somewhat desirable and undesirable condition, respectively. The results regarding the dimension of stress control revealed 44.8%, 51.3% and 3.9% with desirable, somewhat desirable and undesirable condition, respectively.

The results showed that there was a significant relationship between exercise and general health ( $P < 0.001$ ). Out of 764 participants 330 (100%) were regularly exercised showed good general health. Out of 434 students who did not exercise, 72 (16.6%) depicted desirable general health, 144 (33.2%) with somewhat desirable and 218 students (50.2%) with undesirable general health.

There was a significant relationship between smoking and general health ( $P < 0.001$ ). Out of 764 people participating in the study, 724 individuals were non-smokers. Among them 402 (55.5%), 144 (19.9%) and 178 (24.6%) people were in a desirable, somewhat desirable and undesirable general health condition respectively. Moreover, all smoking participants showed undesirable general health conditions.

There is a significant relationship between nutrition and general health ( $P < 0.001$ ). Out of 392 people with good nutritional status, 380 (96.9%) and 12 (3.1%) people showed desirable, somewhat desirable general health. The whole 88 participants with somewhat desirable condition showed an undesirable general health. Out of 284 students with undesirable nutritional condition, 22 (7.7%), 132 (46.5%) and 130 (45.8%) students showed desirable, somewhat desirable and undesirable general health, respectively.

There was a significant relationship between safety and general health ( $P < 0.001$ ). Out of 200 participants who obeyed the safety rules at desirable level, 192 (96%) and 8 (4%) people showed desirable and somewhat desirable general health, respectively. Out of 402 students who obeyed safety rules at a moderate level, 210 students

(52.2%) showed desirable general health, 92 students (22.9%) had somewhat desirable general health and 100 students (24.9%) showed undesirable general health. In addition, out of 162 participants who did not obey the safety rules, 44 (27.2%) and 118 (72.8%) students showed somewhat desirable and desirable general health condition, respectively.

There was a significant relationship between stress control and general health ( $P = 0.000$ ). From the view point of stress control, the results revealed that 52.2%, 46.6% and 1.3% of the students obtained desirable, somewhat desirable and undesirable levels. Out of 420 students who obtained undesirable score for stress control, 27% showed good, 22.9% moderate and 50.1% weak general health.

### Conclusion:

The obtained results represents that there is a relationship between general health and gender. The findings of the present study are similar to the studies by Samimi et al and Rozmus (11,14). Abbasi, and Liyod and Garterell found no significant relationship between gender and the incidence of health issues (15,16). In fact, the difference; from one point of view, is related to the gender of the students, and on the other hand, it is related to emotional dependencies of female students to their families and to some extent to perception of lack of security in social and cultural environment (17).

The results on the relationship between marital status and general health showed that it was a significant. Married students possessed a better general health. Hosseini et al indicated that marital status showed a significant relationship with mental health (18).

Regarding the relationship between general health and the place of residence, the findings of the present study showed that local students had a higher level of health. It confirms the results of the studies by Samimi et al and Rozmus while Ghareby and Hasheminasab did not find significant relationship between general health and place of residence (19,20). To explain the difference, it may be stated that the level of general health is reduced in students living in dormitories because of the differences existing between the students with

various cultures and traditions, being far from family and lack of support. Kenny and Donaldson stated living away from family, economic constraints and concerns about providing accommodation as the causes of mental disorders (21). It seems factors such as support received from being with family, and the consequences of lack of support due to social isolation or living away from family directly affects general health of students. It is stated that social support has a moderating effect which directly affects health. However, it helps moderation of the consequences of acute and chronic psychological pressure on health of people (22). Therefore, the vulnerability of female students is more than male during academic education due to lack of social support, living away from family and based on vulnerability-stress model (23).

The findings of the present study revealed that those students with independent economic status showed desirable general health. Jamshidi et al reported that people with lower level of social and economic condition had undesirable general health. This confirms the findings of our study (23). However, Alagh and Omokhodion in a study at Ibadan University in Nigeria showed that there was no relationship between financial status and healthy lifestyle. It shows that the common need of all students is health. To improve health, its promotion should be included in the academic courses (24).

The results regarding the second objective of the study - to determine the relationship between the lifestyle in different dimensions and general health of students - are as follow:

There is a significant relationship between lifestyle in nutrition dimension and general health of students. It confirms the results of Alagh and Omokhodion study in Nigeria in 2008 (24). In a study by Nojomi and Najmabadi in 2006 they suggested that 12.4% of students had overweight with unhealthy diet (25). This rate was higher in our study (37.17%) which may be because of sample size and the criteria for investigating the status of nutrition. Ayranci et al and Morimoto found that there was a significant relationship between nutrition and general health (26,27).

In the present study, there was a significant relationship between "exercise and physical activity" and the status of general health. Studies report that the effect of "exercise and physical

activities" on mental and general health cannot be denied (25). Stock and Wille found that students with highest level of physical activity had the lowest complains of health (28). Gomez-Lopez et al showed that students do less exercise due to insufficient time and a series of external obstacles. Moreover, inactive lifestyle is more common in female students (22). Their findings confirm the results of our study.

The present study showed that there was a significant relationship between obeying safety rules and general health. It confirms the results of the study by Shahraki Khodabandeh et al (29) and a study by Mckean as well (30).

There was also a significant relationship between the dimension of smoking (of lifestyle) and general health. It confirms the studies by Morimoto (27) and Stock and Wille (28). Jamalian et al reported that 40.54 of male and 13.81% of female students experienced smoking at least once (31). Forotani and Rezaeian stated that living in dormitories provide a more appropriate situation for smoking (32).

Studies on the motives of students toward drugs, smoking and alcohol show that the main reasons include imitating friends and going with the flocks. Other reasons for inclination to drugs, smoking and alcohol include lack of meeting emotional needs, lack of educational success, unemployment, disputes within families.

In the present study, there was a significant relationship between stress control and general health. It confirms studies Morimoto studies (2007) and Hasheminasab (2004). Kenny and Donaldson (2004) reported living away from family, economic constraints and concerns about accommodation as the causes of mental disorders among students not studying far from home hometown (21).

Miyuki et al in a study entitled "the relationship between lifestyle and mental health in Osaka (Japan)" found out that there was a significant relationship between lifestyle and mental health, and 4 items out of 8 items of general health significantly depended on mental health (32).

The present study shows the necessity for attention to - and also emphasis on - the role of improved awareness of students about improvement of lifestyle and corrects behavioral habits. In this way, students may prevent diseases by considering

lifestyle as a preventing factor and improving their lifestyle.

### Acknowledgement:

The present study was extracted from a research proposal approved by Islamic Azad University of Bandar Abbas. The authors would like to take this opportunity to express their gratitude to Dr. Dehghani – the Vice-chancellor for Research at the university – for his guidance and support.

### References:

- Vadahyr A, Sadat M, Ahmadi. B. From the perspective of women's health and health care. *Journals of Women's Studies*. 2008;6:134-155. [Persian]
- Stanhope M, Lankester J. Public health nursing. Chicago: Mosby Press; 2008:12.
- Borhani F, Abasszadeh A, Kohan S, Golshan M, Dartaj rubbe I. Relationship between body mass index and lifestyle among young adults in Kerman. *Iranian Journal of Research in Nursing*. 2008;2:65-72. [Persian]
- Park Jay, Park Kay. Community Medicine. H. Shojaei. Tehran: Tehran Samat Press; 2005:42. [Persian]
- Moldrup C. The use of the terms" lifestyle medicine's or lifestyle drugs". *Pharm World Sci*. 2004;26;193-200.
- Navvabi Nejad SH. Attitude os students about role of consider in help to them fornsolving them life problems. Third National Seminar students of Mental Health. 2006: Tehran, Iran.
- Tol A, Tavassoli E, Sharifrad GH, Shojaezadeh D. The Relation Between Health\_ Promoting Lifestyle and Quality of Life in Undergraduate of Students at School of Health, Isfahan University of Medical Sciences. *Health System Journal*. 2011;7:442-448.
- Sadeghian E, Farhadin Wasab A, Falahian, Gh. The study of Mental Health status in students of Hamadan Universityof Medical Science in 2006. *Journal of faculty of Nursing and Midwifery, Tehran university of Medical Sciences*. 2009;1:44-53. [Persian]
- Brukner FPA. Endocrinologuc condition in medical problems. Athletes: Black well scince Press; 1997:216.
- White RD, Sherman C. Exereise in dibetes Managements, maximizing Benefits controlling risks. *Sporsmed*. 1999;27:63-76.
- Rozmus CL, Evans CR, Wysochasky M, Mixon D. An analysis of health promotion and risk behavioral of fresh man college students in a rural southern setting. *J Pediat Nurss*. 2005;20:25-32.
- Goldberg DP. The detection of psychiatric illness by questionnaire. New York: Oxford University Press; 1972.
- Yaghoobi A, Farhadi M, Ghanbari N, Kakabaraei K. Emotional Intelligence Quotient and Homesickness with General Health in Students. *Tabriz University of Psychology Journal*. 2008;9:135-151. [Persian]
- Samimy R, Masroor Rodsary D, Hosseini F, Tamadoon ara M. Lifestyle associated with public health students. *Journal of Nursing*. 2007;19:83-93. [Persian]
- Abassi A. Survey the Mental Health in Yasooj Medical Sciences University Students. *Teb va Tazkyeh Journal*. 2001;78:8-34. [Persian]
- Lloyd G, Gartrell NR. Psychiatric Symptoms in Medical Students Comparison. *Psychiatry*. 2004;3:252-265.
- Zare'ian Jahromi A, Ghofranipour FA, Ahmadi FA, Anoushirvan K, Danesh Noore A, Mohammad I. Lifestyle concept in adolescent boys. *Qualitative Research*. 2008;6:73-84. [Persian]
- Hosseini SH, Kazemi SH, Shahbaz Zahad L. The relationship between exercise and mental health of students. *Mazandaran University of Medical Sciences Journal*. 2007;15:61-67. [Persian]
- Ghareb Y. The relationship between the health of nurses in teaching hospitals affiliated with the University of Medical Sciences (dissertation) Zahedan: Zahedan University of Medical Sciences: 2005;7-8. [Persian]
- Hasheme Nasab N. Study of occupational stress and mental health status of midwives working in a government hospital in Tehran, Iran (dissertation). Tehran: Nursing and Midwifery University: 2006;72. [Persian]
- Kenny ME, Donaldson GA. contributions of Parents Attachment and family Structure to the Social and Psychological Functioning of First Year College Students. *Journal Counseling Psychology*. 1991;38:470-486.

22. Gómez-López M, Granero-Gallegos A, Baena-Extremera A. The Abandonment of an Active Lifestyle within University Students: Reasons for Abandonment and Expectations of Re-Engagement *Psychologica Belgica*. 2011;51:155-175.
23. Jamshidi L, Mohammad K, Jazayeri SA, Hosseini S, Jalyany K, Keshavarz SA, et al. Relationship between body mass index and socioeconomic status (occupation and education), parents of girls schools in Kish Island. *Payesh Journal*. 2013;11:195-200. [Persian]
24. Alagh TB, Omokhodion FO. Correlates of self-reported physical health status of students of the University Ibadan, Nigeria. *West Afr J Med*. 2005;24:214-218.
25. Nojomi M, Najamabdi S. Obesity among university student, Tehran, Iran. *Asi Pac J Clin Nutr*. 2006;15:516-520.
26. Ayranci U, Son N, Son O. Prevalence of nonvitamin, nonmineral supplement usage among students a Turkish university. *BMC Public Health*. 2005;5:47.
27. Ezoe S, Morimoto K. Behavioral life style and mental health study of japenes factory workers. *J Prev Med*. 1994;23:98-105.
28. Stock C, Wille L, Krämer A. Gender Specific Health Behaviors of german University Students Predict the Interest in campus Health Promotion. *Health Promot Int*. 2001;16:145-154.
29. Shahraki Khodabandeh S, Mohammad Alizadeh S, Jazi M. Prevalence Ponomokozees and safety precautions against the disease in Kerman Coal Mine Workers in 2001. *Daneshvar Journal*. 2002;8:33-40. [Persian]
30. Misra R, Mckean M. Cxouege students academic stress and its relation to their anxiety"time management" and leisure satisfaction. *J Health Sci*. 2000;16: 41-45.
31. Javedan A, Jamaliyan R. Drug abuse among students in Kerman about smoking. *Resane Daroo Paghsh Journal*. 2011;54:10-14.
32. Forotani MR, Rezaeian M. Knowledge and drug abuse among University students in the town of Larestan. *Journal of Nursing*. 2006;18:21-29. [Persian]