

Institutional health promotion standards in school of medicine at Shahid Beheshti University of Medical Sciences according to medical students' opinions in 2020

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Abstract

Background: Health promotion in occupational and educational environments contributes to the improvement and higher efficiency of the people affected by them. The health status of medical students as future providers of health services has great importance. This study aimed to evaluate health promotion standards in the school of medicine at Shahid Beheshti University of Medical Sciences.

Methods: This cross-sectional study evaluated health promotion standards of school of medicine using a questionnaire filled out by medical students in 2020. The validity and reliability of the questionnaire were confirmed. The questionnaire measured health promotion standards in the fields of healthy nutrition, facilities for proper physical activity, providing a healthy environment for students, adequate education for health promotion and disease prevention. Analytical and statistical tests were performed using IBM SPSS 23 software.

Results: Among 340 medical students participated in the study 31.8 percent were in the basic sciences grade, 26.5 percent were staggers, and 41.8 percent were interns. The mean score of all questions among different grades was 1.11 (SD=0.33), 0.97 (SD=0.43), and 0.93 (SD=0.34), respectively (on a scale of 0-3). A significant difference was reported in the comparison of "basic sciences versus staggers (PV=0.011)" and "basic sciences versus interns (PV<0.01)". The mean score of questions overall was 1.00 (SD=0.37).

Conclusion: Based on findings, health promotion in the school of medicine at Shahid Beheshti University of Medical Sciences was in the medium range, which demonstrates the need for future policies that lead to a more efficient health-promoting environment.

Keywords: Environmental Health; Occupational Health; Health Promotion.

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Introduction

Health can be defined as a process enabling people to achieve high quality and healthy lifestyle

through their assets, based on the Ottawa charter of Health promotion. In other words, health promotion consists of proper health education, disease prevention, and

rehabilitation. In the Ottawa charter of health promotion, special attention has been dedicated to community health and future policies on that basis (1-4).

Community health as a significant element of general health focuses on healthy social communications and healthy social environments. It also has a direct effect on other aspects of health such as physical and mental health. As shown in previous studies, health promotion in an educational environment can lead to better academic outcomes and prepare students for other forthcoming challenges (5-8). Regarding this subject, Dooris has introduced six areas of focus in health promotion of academic environments (9). On the other hand, educating students to validify actions contributed to health promotion has a significant role in maintaining a healthy environment. Kaboudi et al., in a study based on 420 medical sciences students, found a positive correlation between students' health literacy and their health-promoting behavior (10).

In the context of health promotion in workplaces, it includes actions that support employees' health and welfare. Such actions can focus on alternating personal habits (physical activity, healthy nutrition, etc.), or they may target policies that support a healthier workplace environment. Iranian Ministry of Health in the "Executive instruction package for basic health services of government employees" has introduced different objectives and areas of work for health promotion in government organizations(5). Health promotion in any organization can facilitate higher efficiency and profitability on the road to achieving their goals (11). In other document, O'Donnell has worked on different aspects of a health-promoting workplace such as smoking control, physical activity, stress management, rehabilitation, etc. (12).

In every society, academic students are the prominent candidates and procreators to determine that society's future. Particular

circumstances such as new cultural and social environments and financial struggles can be a challenge for students. In addition, medical students have other challenges to overcome, such as emotional stress in hospital settings, dealing with chronic and incurable diseases, fatality, mourning families, and unclear future occupational prospects (13-16). Mehri et al. studied the health-promoting lifestyle among university students, and There was a significant correlation between all domains of health-promoting lifestyle Which shows us health promotion in students is an integrated process and has many different aspects to focus on. The highest score among the domains was for an interpersonal relationship, and the lowest score was for nutrition and physical activity (17). In a similar survey, mazloomi et al., studied the health-promoting lifestyle of 440 medical students. Based on this study, the highest score was for spiritual growth, and the lowest score was for physical activity (18). One of the most critical factors of failing in academic education and future work environments is the lack of general health in individuals. Studies show that students' academic outcome significantly relates to their satisfaction with the educational environment and its health standards (19, 20). On that basis, we can conclude that providing a health-promoting environment for students has great significance. Also, Obtaining a healthy environment is an essential component in evaluating an educational program, and global attention towards the quality of education and healthy academic environments is increasing (21, 22).

Considering the importance of health promotion in educational and occupational environments and the need for a valid and precise scale to assess different social environments in the field of health promotion, this study is aiming to evaluate health promotion standards in the school of medicine at Shahid Beheshti University of medical sciences according to the students. Health promotion as said before is an

integrated system that should cover all aspects of health including physical, mental, and social health. Our goal was to assess a school of medicine as a health-promoting environment in every aspect and recognize its weaknesses and strengths. This study's results can be used as a basis for future policies and decisions, leading to a healthier academic environment.

Methods

This cross-sectional study with a descriptive approach was conducted in February 2020 to evaluate health promotion standards in the school of medicine at Shahid Beheshti University of medical sciences.

All the current medical students of approximately 2600 people were considered eligible to enter the study. Recently graduated students and those who were taking a semester of academic leave were excluded from the study. Using a stratified sampling and proportional allocation by Raosoft software (23), the calculated sample size was 331 out of 2340 students, with a confidence level of 95% and an error margin of 5%. The questionnaire was distributed to 540 students including 230 interns, 140 staggers and 170 students in basic sciences period. We used an online platform (www.porsline.ir), and 340 out of the 540 current general medicine students participated (response rate:63%).

An anonymous self-administered questionnaire consisting of 22 questions, two of which directed at the students' demographic characteristics (gender, grade) and the remaining 20 questions regarding the health promotion standards, was designed based on the "National instruction package for basic health services of government employees" (5). Six community medicine experts at Shahid Beheshti University of medical sciences approved the questionnaire's validity and reliability. Cronbach's alpha was reported to be 0.9.

The health promotion standards in the questions were in the fields of healthy nutrition, mental health, routine check-ups for noncommunicable diseases, proper physical activity facilities and opportunities, smoke banning in the educational environment, first aid equipment, adequate information provided on vaccination and workplace hazards, accepting suggestions and criticism from students and educational opportunities on health-promoting lifestyle. The questions were multiple-choice, and the choices to answer each question were non-execution (0), trivial execution (1), partial execution (2), and complete execution (3) of the standard.

All the data gathered in this study was entered in IBM SPSS 23 software for windows to be analyzed. The statistical description of each demographic and health standard variable was performed using frequencies, means, and standard deviations. T-test, one-way ANOVA, and post-hoc test were used to analyze the differences in health standards perception regarding the participants' demographic characteristics.

The methods and proposal of this study was reviewed and approved by the Ethical Review Board and Research Committee of Shahid Beheshti University of Medical Sciences (code number: IR.SBMU.MSP.REC.1397.59)

Results

A total of 340 current medical students participated in this survey. There were 174 females (51.2%) and 166 males (48.8%). 142 participants were interns (41.8%), 90 were staggers (26.5%), and 108 were studying at the basic sciences level (31.8%).

Among health promotion standards, the question regarding "inhibition of smoking in the faculty area" had a mean score of 2.04, On a scale of 0-3 (SD=0.93) as the highest score above all. Furthermore, the weakest performance was regarding



Figure 1- Mean score of health promotion standards

"educating students to be prepared when facing hazardous situations like earthquake and fire," with a mean score of 0.42, On a scale of 0-3 (SD=0.58). The mean score for each question and their comparison is displayed in Figure 1.

The mean score of the questions overall was reported to be 1.00 (SD=0.37) on a scale of 0-3, which indicates a weak/moderate execution of the health-promoting standards according to the students.

The mean score of the questions in the male group was 0.97 (SD=0.39), and in the female group was reported to be 1.02 (SD=0.35). Based on the independent sample *t-test* performed, there was no significant difference between the two sex groups (PV>0.05).

Furthermore, the mean score of the questions was 0.93 (SD=0.34) in the interns' group, 0.97 (SD=0.43) in the stagers' group, and 1.11 (SD=0.33) in the students at basic sciences level. According to the *one-way ANOVA* and *post-hoc test*,

there was a significant positive difference when comparing basic sciences students to the interns ($PV < 0.01$) and basic sciences students to the staggers ($PV = 0.011$). However, the difference between interns and staggers was reported not to be significant ($PV > 0.05$).

Discussion

This study aimed to evaluate health promotion standards in the school of medicine at Shahid Beheshti University of medical sciences and compare them to the existing data on health promotion standards in academic and occupational environments. Training medical students to be future ambassadors of health among communities can have variant aspects, and a health-promoting setting is one of them (23, 24). Today, in the process of training future physicians, Health promotion and illness prevention are significant education standards, and a medical university can be the starting point for founding a more health-promoting medical system (25).

Our findings showed a moderate performance regarding the health promotion standards in the school of medicine at Shahid Beheshti University of medical sciences. However, a significant difference was reported while comparing basic sciences level students to both staggers and interns. These results can be an indicator of ongoing progress regarding health promotion standards. Considering the importance of health promotion in academic environments, future studies can specifically focus on the actions that led to a more health-promoting setting through the years, the limitations, strengths, and improvable fields.

Based on our results, proper education and instructions about different aspects of a healthy life and a healthy environment are lacking. Future policies can focus on educating students to face different challenges and have a health-promoting lifestyle. As shown in previous studies, educating and enabling students to have

adequate physical activity and healthy nutrition can play an essential role in obtaining a more healthy lifestyle as they are the most significant obstacles to achieving a healthy lifestyle among students (17, 18). Also, advancing students' health literacy through education has been proven to affect their health-promoting behaviors positively (9).

There was no previous study evaluating the health promotion standards in a medical university in Iran. This survey can be a stepping stone to further investigation, planning, policy-making, and action-taking to provide a healthier setting for our academic students and facilitate the road to a more health-promoting community overall.

This survey has been conducted in Shahid Beheshti University of Medical Sciences using a self-reporting questionnaire from the students' perspective. Thereby, the generalization of the results should be made with caution.

Conclusion

The purpose of this study was to evaluate health promotion standards in the school of medicine at Shahid Beheshti University of Medical Sciences According to the students' opinions. The results showed a medium performance regarding health promotion standards. To achieve a healthy community, future organizational actions should focus on the advancement of every aspect of health; and a restorative work and education environment, the subject of our study, is one of the most significant and influential factors impacting our community's health. Faculty administrators and health educators can use the results of this study to recognize the strengths and weaknesses of the program regarding health promotion standards, the areas that need urgent focus, and possible future policies to obtain a more health-promoting setting.

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Conflicts of interest

The authors declare no conflicts of interest in this study.

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Author Contributions

All authors made substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; took part in drafting the article or revising it critically for important intellectual content; gave final approval of the version to be published; and agree to be accountable for all aspects of the work.

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