

Academic failure and students' viewpoint: The influence of individual, internal and external organizational factors

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ABSTRACT

Background: Educational failure is one of the most important problems in higher education institutes in Iran. This study was performed to investigate the factors affecting students' academic failure in Isfahan University of Medical Sciences. **Materials and Methods:** In this cross-sectional descriptive study, 280 students of Isfahan University of Medical Sciences were studied in 2009. They were chosen using multiple cluster sampling. The students' demographic characteristics and study information were collected by a valid and reliable questionnaire. Data were analyzed with SPSS (15) software. **Results:** The most important factors affecting educational failure from students' point of view were: curriculum (4.23 ± 0.63), factors related to educator (3.88 ± 0.55), learning environment (3.63 ± 0.62), family factors (3.53 ± 0.6), socioeconomic factors (3.45 ± 0.69). There is a significant relationship between attitudes of students in two sexes and educator ($P = 0.03$) and socioeconomic environment ($P = 0.003$). In addition, the results did not show a significant difference between attitudes of students with age, marital status and employment status ($P > 0.05$). **Conclusion:** More attention to curriculum, factors related to educator and learning environment can prevent students' educational failure, in addition to preventing loss of resources and contribute to develop a more effective educational system.

Key words: Educational failure, medical education, students

INTRODUCTION

Educating efficient and effective human forces is considered among the main duties of universities. Every year, universities admit newcomer students and graduate some others; in this continuous cycle, education quality has a crucial position. Thus, increasing the quality of educational system

is considered the most influential factor in developing the countries; this is because students achieve a position as a result of their academic success in which their maximum internal and external forces are used for achieving goals of higher education and obtaining necessary conditions for successful social life. On the other hand, lack of success in education paves the ground for several personal and social problems and deviation from achieving the goals of educational system.^[1] In this regard, one of the major problems of higher education centers is the students' academic failure which not only leads to the waste of current expenditure and time but also generates mental-psychological, social and family problems for the university students. According to studies, this problem is increasing every year so that many students cannot handle the curriculum (academic courses) or complete it in due time.^[2] Academic failure includes various aspects of educational failure such as frequent absence from classes, dropping out, repeating the grade or low quality of education.^[3] UNESCO attributes the concept of academic failure to repeating the grade, early dropout and decline in

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the educational quality of learners.^[4]

According to studies, about 12% of students of medical universities are probated at least one term during their education and this probation not only causes some mental-psychological problems for them, but also puts them at the risk of educational deprivation considering their academic progress, damages optimum utilization of scientific principles for training human forces and human and financial resources and also social dissatisfaction. Furthermore, students' academic failure and dropout cause some challenges and problems for the students themselves along with enormous losses for the country.^[5] Studies have shown that people with academic failure are more probable to use drugs at older ages; therefore, academic failure and dropout might ensue drug and alcohol addictions.^[6] A study in one of the American universities on people who committed suicide indicated academic failure as the most common cause of their suicide.^[7] Various studies have suggested that various factors can lead to academic failure; in some researches, drug addiction^[8] has been considered and other studies have demonstrated that personality factors, motivation and interest, satisfaction, loneliness, success expectation and family circumstances can affect level of academic success in universities.^[9] In a comprehensive approach, the factors involved in academic failure can be classified in three categories of individual factors (components like having a goal, motivation, anxiety, studying method, intelligence, attention, planning, affective and mental conditions and lack of course attendance), internal organizational factors (professional characteristics of instructors, space and proper facilities and equipment) and external organizational factors (parents' education level and their dealing with students' academic failure, socioeconomic status of families and unclear and uncertain occupational prospects).^[10-13]

Considering the above mentioned points, it can be stated that academic failure or dropout of university students is considered not only a personal problem but also a main social problem and some fundamental measures should be taken to solve this problem since the issues it causes will affect the society in future. In the meantime, the academic failure of students of medical universities is of crucial importance; if these students do not have a proper quality of education, this problem will clearly demonstrate itself due to their occupational sensitivity and its relationship with the health of community. As a consequence of academic failure, these students will perform poorly in hospitals and health centers and this poor performance will be sometimes irreparable.

With regard to the importance of the mentioned points, the realities that students mostly come from various family environments, cities and villages to open and partially free spaces of universities, the social, political and cultural atmosphere of the country and simultaneous presence of boys and girls in learning environments, their being away from the family and living in student dormitories or in unfamiliar houses and education limitations of universities may pave

the ground for their academic failure. Hence, the present study aimed at identifying factors which affect academic failure from the viewpoint of students at Isfahan University of Medical Sciences (Iran).

MATERIALS AND METHODS

This was a cross-sectional, descriptive-analytical study on 280 students from different faculties of Isfahan University of Medical Sciences (Iran) in 2008. Sampling was conducted by the multi-stage clustering method. Thus, the statistics related to the total number of students was separately specified and the number of required samples from each faculty was determined considering the ratio of the population of each faculty to total population of university students. First, two or three classes were randomly selected in each faculty and some students were randomly selected from among the students of each class. In the case of reluctance or lack of cooperation of each student, s/he was excluded from the study and another sample was replaced.

Data gathering tool in the study was a researcher-made questionnaire which consisted of two parts. The first part of the questionnaire included general and demographic information of students. The second part of the questionnaire contained questions about students' viewpoints with regard to the factors which affect academic failure, which was divided to six general areas according to the reliable sources. These are as included family (7 questions), learner (9 questions), instructor (11 questions), learning environment (10 questions), curriculum (3 questions) and socioeconomic (7 questions) factors. The questionnaire was designed in Likert style. The scoring method of the responses was in the following way:

- 1 for totally disagree,
- 2 for disagree,
- 3 for no idea,
- 4 for agree and
- 5 for totally agree.

The validity of the questionnaire was evaluated using face and content validity methods. Thereby, the questionnaire was prepared according to reliable sources and books and the comments of six professors and experts were obtained and applied to it. To check its face validity, the questionnaire was given to a number of university students and their comments and questions were also applied to the questionnaire. Its reliability was measured using internal consistency ($\alpha = 0.9$).

To collect the data, the questionnaires were gathered in the first semester after coordinating with the education department of the university and educational authorities of each faculty and presenting the required training to the information collectors. After completing the questionnaires and extracting the data, SPSS statistical software (ver. 15) was used to gather descriptive statistics and run independent t-test and one-way ANOVA. The significance level of $\alpha = 0.05$ was considered for all the tests.

RESULTS

From total 280 participants in the study, 52.9% and 47.1% were male and female students, respectively. Their mean age was 22.12 ± 3.7 years old. The studied students were classified at three levels of associate, bachelor and master, and doctorate. 85% of the participants were single, 68.6% were living in dormitory, 29.6% were living with their parents or spouse and 1.8% was living in rental houses. 11.8% of students were employed and 88.2% were unemployed.

The findings of this study showed that the highest score was related to the curriculum (4.22 ± 0.62) among the studied areas according to the students' viewpoints. After that, instructor (3.88 ± 0.55) and environmental factor had the highest scores. Furthermore, the socioeconomic area had the lowest score (3.45 ± 0.69) among the factors affecting academic failure from the students' viewpoints [Table 1].

According to the participants, the most important factors which could affect academic failure of students were in the following way: in family-related factors, 81.5% of students mentioned lack of free environments with mutual understanding in the family; in the learner-related factors, 90.7% considered motivation factor for educational issues; in the factors related to instructors, 80.6% reported lack of experienced instructors for teaching educational courses; among the factors related to socioeconomic issues, 76.4% stated lack of promising employment and economic motivations and, among the factors related to learning environment, 73.6% mentioned disregarding students' problems by authorities. The influential factors in curriculum, as the most crucial factor for academic failure from the students' viewpoints, are demonstrated in Table 2.

The findings demonstrated a significant difference between female and male students' viewpoints in terms of two areas of instructor ($P = 0.03$) and socioeconomic environment

($P = 0.003$); i.e. male and female students had higher mean scores in instructor and socioeconomic factors, respectively. Moreover, the results did not show any significant differences between the viewpoints of students and their marital and occupational status.

DISCUSSION AND CONCLUSION

Academic failure means lack of success in education and leads to the loss of higher education costs and social and economic losses. In this study, the viewpoints of students on the factors which affect academic failure were studied. Among the six studied areas (family, learner, instructor, learning environment, curriculum and socioeconomic factors), students stated curriculum as the most influential factor for academic failure. Consistent with this study, Dehcheshmeh *et al.* studied the factors which affected educational progress and stated that curriculum was the most important factor for students' progress.^[13] Also, Vanhanen *et al.* mentioned in appropriate curriculum as the failure factor among nursing students.^[14] In the area of curriculum, disproportionate curriculum with abilities and values of students and also their future occupations were the most important factors from the viewpoints of students.

In the instructor area, the role of experienced teachers and their social behaviors was stated as the important factor in the academic failure of students. Hammond's study also revealed the quality of instructor as one of the most important factors for the success of students.^[15] Hazavehei's investigation also found that teaching methodology including factors like teachers' efforts for explaining the materials, effectiveness of teaching methods, impact on teaching methods, learner-centeredness, observing discipline and content integrity, creating active learning, using techniques and available teaching facilities can affect the educational status of students to some extent.^[11]

Students believed that motivation, interest in the field of study and self-confidence were the most important factors in the academic failure. Uguroglu and Walberg noted the crucial role of motivation in achieving educational success.^[16] Some studies also mentioned students' personal characteristics such as lack of interest in their major as the main reason for their probation.^[17,18]

Among the learning environment factors, more attention of authorities to the problems of students and also limited library facilities and lack of application of proper educational

Table 1: Results of different areas of academic failure from the viewpoints of students

Rank	Area	Mean \pm SD
1	Curriculum	4.23 \pm 0.63
2	Instructor	3.88 \pm 0.55
3	Learner	3.79 \pm 0.47
4	Learning environment	3.63 \pm 0.62
5	Family	3.53 \pm 0.6
6	Socioeconomic	3.45 \pm 0.69

Table 2: Frequency distribution of factors related to curriculum which affect academic failure

The factors related to curriculum	Too low	Low	Average	High	Too high	SUM
Disproportionate lesson courses with students' abilities and values	3 1/1%	4 1/8%	41 14/6%	118 42/1%	113 40/4%	280 100%
Disproportionate lessons of the courses with future occupation	1 0/4%	4 1/4%	42 15%	127 45/4%	106 37/9%	280 100%
Unattractiveness of the course content	1 0/4%	6 2/1%	33 11/8%	106 37/9%	134 47/9%	280 100%

technology with regard to the content of each lesson were mentioned as the most influential factors for the academic failure.

Lack of free environments with mutual understanding in the family, lack of parents' appreciation of education and lack of boosting students' spirit by the families were among the most notable family factors which were recognized by students. In Dehbozorgi's study, the role of parents was considered an important factor for students' educational progress and it was stated that those parents with higher educational level expected the same from their children and were considered more appropriate for them. This unconsciously pushes students to work harder in order to show more successful performance like their parents.^[19]

In the socioeconomic area, lack of promising economic and occupational motivation, lack of social respect and status related to the field of study and lack of job security in the future were mentioned as the most important factors by students. Regarding this point, Leondari *et al.* mentioned "a clear and transparent view from the occupational prospect" as an influential factor in educational performance.^[20]

The relationship between demographic variables and students' viewpoints on the effective areas for their academic failure was considered in this study. Among demographic variables, there was a significant relationship only between sex and students' viewpoint in terms of two areas which affected academic failure. Thus, the area of instructor had a more important role in the emergence of academic failure from the perspective of male students; in contrast, female students gave a more dominant role to socioeconomic environments. In Hazavehei's study, there was a significant relationship between sex and students academic failure.^[1] Furthermore, some other studies revealed a relationship between age, marital status and academic failure^[21,22] while there was no significant relationship between these factors and students' perspectives on academic failure in the present study.

Lack of active participation of some students in the research was one of the most important limitations of this study. To overcome this limitation, there was an attempt to explain the objectives of the study and provide participation motivations for this group of students.

Seemingly, students believe that different factors affect academic failure with different degrees. Accordingly, more precise attention to factors like course content, instructors, teaching methods and learning environments in education and welfare programming can prevent from the emergence of academic failure, especially in the fields of medical sciences.

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