

Original Article

A qualitative study about attrition in medical and other health sciences schools

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ABSTRACT

Introduction: Entering into a medical school is characterized by the start of a stressful period for medical students; however, some of them are not able to manage this period and, thus they decide to withdraw from the school. So, the present study investigated the reasons of attrition among the students of medical and other health sciences schools. **Method:** By using stratified and randomized sampling, 176 students were selected for participating in this study. The present study was a qualitative study using semi-structured interview. Inductive content analysis method was used for data analysis. **Results:** Five main themes were developed in the present study including: decreased motivation, family issues, financial problems, psychological problems, and fear of future. **Conclusion:** Attrition in medical and other health sciences schools is an important issue that should be identified at -risk students at early stages, and be supported to prevent drop out.

Keywords: Attrition, students, medical and health sciences schools

Introduction

Entering into a medical school is characterized by the start of a stressful period for medical students. Despite the existence of academic and emotional stressors, many medical students cope with their difficult new life and can achieve success. Some other students are not able to manage this period, thus, they decide to

withdraw from the school^[1].

In recent years, there have been reports about attrition in other health science schools like nursing, midwifery and so on^[2]. A study conducted at one of the Malaysian medical schools about attrition rate showed that stakeholders need to review the required academic standards regarding admission into the medical schools in order to lessen the attrition rate^[3].

Another study carried out at one medical school in Nigeria about attrition rate showed that more interactive teaching programs must be fortified in faculties to help students with their problems. Good counseling programs should be strengthened to handle cases of attrition and prevent discouraging low self-esteem students and not to allow them to be defeated and depressed for the rest of their lives^[4].

The integration of medical and other health science education with a health care delivery system is one of the greatest significant successes of the health system of Iran, which has been in charge of public health, prevention, treatment and planning

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of health care and medical education. This integration has provided a unique educational environment for all medical and other health science students to study in a shared environment under the supervision of medical universities [5].

In spite of the existence of some previous papers conducted on attrition around the world, the aim of the present study was to investigate the reason of attrition among the students of medical and other health sciences schools at Shiraz University of Medical Sciences as an integrated medical university.

Methods:

The present study was a qualitative study designed to determine the reasons of students' attrition in medical and other health sciences schools. A semi-structured interview was used for this purpose, since semi-structured interviews would allow the students to show their opinions in their own words freely, besides semi-structured interviews could afford valid, reliable and consistent data.

The number of students reported with attrition was equal to 325 in 2014-2017 including the students studying in majors such as medical, dentistry, pharmacy, nursing and midwifery, health and nutrition, and health system information. The sampling method was done purposefully among the students reported with attrition; therefore, stratified and randomized sampling was used. At the end, 176 students were selected through maximum variation sampling [6]. The variables of this study included school of studying, sex, living at home or dormitory, marital status and year of study to guarantee that maximum variation was reached. Data collection was completed until data saturation was reached. Interviews were done by making telephone calls with students. The time of every interview was about 20 minutes.

Data Analysis:

Inductive content analysis method was used for data analysis [7]. The unit of analysis was interviews, each one took about 20 minutes, and then every interview was transcribed; and again was read once more to obtain a better view. The transcripts were separated into the meaning units as sentences or words in terms of having features related to each other. Then, each meaning unit was abstracted and labeled with a code. Different codes were harmonized based on the association of meanings, and the similar meanings were joined together, which created themes. Finally, five themes were made and approved by the researchers.

Trustworthiness:

Trustworthiness is the process of determining reliability and validity of the qualitative research [7]. In the present study, a comprehensive explanation was used that lessened the chance of missing information. For member check, a copy of the codes and transcript was sent to the participants, and they were asked to assess the researchers' understanding of their individual concepts. For peer check, all units, codes and themes were

rechecked by an expert who was familiar with the qualitative research methodology. For obtaining dependability, in-depth methodological clarification was used to allow the repetition of this study.

Ethical considerations:

This study was approved by the deputy of research at Shiraz University of Medical Sciences in Shiraz. The students contributed in the study freely, and their names were not mentioned anywhere.

Results:

Five main themes were developed in the present study: decreased motivation, family issues, financial problems, psychological problems, and fear of future.

Decreased motivation:

This theme was reported by the students frequently. One of the students said:

'I hate the clinical environment'

Another student argued that:

'My family believed that I should be a physician. I did not like the major of medicine and I had no motivation to continue'.

Another student mentioned:

'Medical field is similar to a military unit I must obey all the people that are superior to me and I did not like this environment.'

Family Issues:

This theme was reported frequently by non-native students.

One of the students said that:

'I was not a native student and my family had a lot of problem, so I decided to come back to my family.'

Financial problems:

This theme was reported by some of the students who should have paid money as tuition fee.

One of the students ascertained that:

'At the beginning, I thought that I can pay the tuition fee, but after one year I felt that I am not able to pay.'

Psychological Problems:

Students reported with attrition described their situation as 'lonely', 'depressed', and 'isolated'. One student reported that there had been a time when he had not had any communication with anyone for a month. Another student found it difficult to have enough energy to wake up and go to the university.

One student said:

'I had no one to communicate to and to share my ideas and problems with.'

Another student ascertained:

'It has been difficult to find good friends; I was really alone because of my depressed personality.'

Another student said:

'The problems were originated from inside of me.'

Fear of future:

Fear of future and specially finding a good career was another concern of these students.

One of the students said:

'I thought I was in deep trouble, and my future was not clear. I thought I cannot find a good job.'

Discussion:

Sometimes, the reasons of students' attrition are not known, but even when they are known, it is not known what to do in order to resolve them. The results of the present study were similar to some of the previous studies [8-10]. These results showed that there were some similarities regarding the important factors influencing university attrition among different countries; however, there were some issues that were not similar.

Regarding the important theme of decreased motivation, the results of the study carried out on determining the important factors in students' motivation showed that some positive attitudes such as wisdom, patience, mindfulness and kindness were important factors in students' motivation. The motivation showed a reversed pattern related to psychological factors [11].

Family issues were another theme that was reported especially by non-native students. Due to the selection of medical students based on a national exam in Iran, some students were also studying medicine at Shiraz University of Medical Sciences who came from other regions of the country. Being far from the home meant that students should have coped with a lot of problems, and this might cause students' burn out. Another important theme was financial problems especially for students who should have paid tuition fee. It is obvious that, this was an important concern.

About the theme of psychological problems, it seemed necessary to have a good consultation system in universities [8]. Experts recommended that support for these students should be integrated in the curriculum, and it should have multiple access points [11]. Fear of future was another theme that was argued by most of the students. Experts recommended educating students in terms of how to cope with uncertainty in medical field, besides medical sciences is not only clinical work but also it is a team work including communication, research and so on [12].

The limitation of the present study was conducting this study based on semi-structured interviews. The other limitation was related to data collection done at Shiraz University of Medical

Sciences resulting in non-representativeness of the results to all medical universities in Iran.

Conclusion:

Attrition in medical and other health sciences schools is an important issue, and it needs to be monitored effectively. It should be remembered that beyond any attrition, there is a young mature adult who leaves the medical field. Therefore, at-risk students should be identified at early stages and supported to prevent the drop out.

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