Brief Communication

Attitude of Medical Students in Preclinical Stage towards their Field of Study at Qom University of Medical Sciences (2015)

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Abstract

Medical students as future doctors play an important role in society health promotion. This study aimed to assess medical students' attitude to their field at Qom University of Medical Sciences (2015). Participants in this cross-sectional study included all three-year pre-clinical stage medical students. 145 students completed Minnesota University standard questionnaire. Scoring of the questionnaire is based on Likert scale. Scores between 16 and 80 represent the total possible score achieved. Data were analyzed using t-test, ANOVA and Pearson correlation coefficient. Mean and standard deviation of the students' attitude score was 59.31±6.68. 11%, 67.6%, 20.7%, and 0.7% had optimistic, good, moderate, and poor attitude, respectively. The mean score of attitude did not have a significant difference in terms of gender, marital status, and status of residence (P>0.05). Having a positive attitude towards one's discipline and future career plays a critical role in learning activities. Appropriate attitude need to be considered in medical education.

Keywords: Students, Medical, Attitude, Employment

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Introduction

Physicians are an important investment for any government and society. Medical students are found to spend large amounts of their time at universities, hoping to play a crucial role in the development of comprehensive health. However, because of many problems, they cannot start their professional activity and provide basic supplies of life until the middle of the third decade of their lives (1). Some researchers believe that the attitude of students and the demands of society should be considered while designing different courses (2). On the one hand, in some cases doctors instead of practicing the role of physicians are engaged in other activities not related to their profession, including tutoring and administration positions. It is obvious that some physicians do not benefit from their professional and practicing abilities. Physician's employment in unrelated areas leads to wasting a part of the financial investment in medical education (1, 3).

A person's attitude towards an issue includes his/her cognitions, emotions, and preparation to act. Attitude is a degree of positive or negative affect related to

psychological objects. Job attitude is defined as one's positive or negative evaluation work, including one's beliefs about, feelings towards, and attachments to one's job. Job satisfaction includes both subjective feelings towards a job and objective cognitive evaluations of specific job matters such as pay, opportunities, and conditions. Therefore, job satisfaction is the psychological feeling that is affected by social factors (4). To stay in one's current job, individuals should be interested in their employment, motivating them to succeed in an achievement.

Attitude towards study results in motivating students to make an achievement. Knowing attitude towards issues is a beneficial variable for predicting social behaviors. Individuals' attitudes may change throughout their lives, affected by their social environment to adapt to it. Accordingly, Most studies point out that attitudes are more changeable during the years of study at university (5) .

One previous study performed in Isfahan in 2003 showed that most of the medical students had a positive attitude towards their future career and 70% of them declared that if they had participated in the entrance examination again, medical field would have been their first choice. These results indicate the positive attitude of most medical students towards their field of study (6). In contrast, medical students in Jahrom declared if they had attended entrance examination again, they would have chosen a field except medicine (7). However, in a study in the UK, the majority of medical students did not have enough confidence in their future career (8). To our knowledge, we do not have any information about students' attitudes at Qom University of Medical Sciences (QUMS). Therefore, this study has been performed to evaluate the attitude of medical students, basic sciences level, towards their field of study and their future career.

Methods

We conducted a cross-sectional study at QUMS from May to September 2015. The participants consisted of three-year pre-clinical stage studying medicine at QUMS. In this study, 145 medical students were selected through convenience sampling. The standard questionnaire of the University of Minnesota was used to collect data. The questionnaire had 16 questions, with a Likert 5-point scale (from strongly disagree to strongly agree) and a range of 16 to 80 scores (9). The questionnaire was prepared through translation and back-translation method by Jamali & Ghalenoei, and its face validity and content validity were approved by our expert panel comprising of two specialists in medical education. Internal consistency was evaluated using Chronbach's α coefficients (0.74) (10).

Because of ethical considerations, the study was conducted in coordination with the authorities and with the consent of the students involved in the study. Inclusion criteria included all students studying medicine in preclinical stage. Exclusion criteria were defined as students suffering from depression according to their clinical documents completed in that entry enrolment form. Consent forms were taken from participants. Finally, data were summarized using statistical measurements including mean, standard deviation, and frequency distribution by SPSS.19. Student t-test, ANOVA, and Pearson correlation coefficients were applied to test our hypothesis. The level of statistical significance was defined at $P<0.05$.

Results

Among 145 participants of the study, 53.1% (n=77) were female, 91.7% (n =133) were single, 58.6% (n=85) were living in a private household, and 36.2% (n=54) in a dormitory. Furthermore, mean and standard deviation of the students' age was measured as 20.19 ± 2.19 years. Mean and standard deviation of attitude towards their field of study and their future career was 59.31 ± 6.68 points from 16-80 range score. Attitude towards the fields of study and career prospects are collected (Table 1).

11% (n=16) of participants had a very good attitude, 67.6% (n=98) had a good attitude, 20.7% (n=30) had a moderate, and 0.7% (one person) had a poor attitude, and 0% (nobody) had a poor attitude. Independent sample t-test and ANOVA test showed that the mean score of attitude towards their field of study and career prospects did not show a significant difference in terms of gender (P=0.864), marital status (P=0.952), and status of residence (P=0.225). Pearson correlation test did not show a significant correlation between age and attitude of students towards their field of study and job prospects (r=0.040; P=0.631).

Table 1. Frequency (percent) of attitude scores towards fields of study based on the each items in the samples

	Items	Completely disagree	Disagree	Neither agree Nor disagree	Agree	Completely agree
1	I selected this major because my grades only allowed admission in this field.	6 (1.4)	14 (9.7)	9 (6.2)	50 (34.5)	66 (45.5)
2	I am satisfied with selecting this field.	76 (52.4)	55 (37.9)	8 (5.5)	5 (3.4)	1 (0.7)
3	Objectives of the courses fit students' needs and expectations.	11 (7.6)	55 (37.9)	38 (26.2)	32 (22.1)	9 (6.2)
4	After studying in this field, I was fascinated more by this field.	46 (31.7)	57 (39.3)	28 (19.3)	12 (8.3)	2 (1.4)
5	I think my field of study will be more valuable in higher levels.	101 (69.7)	37 (25.5)	5 (3.4)	0 (0)	2 (4.1)
6	I think students of other majors have an appropriate view towards my field of study.	79 (54.5)	47 (32.4)	11 (7.6)	6 (4.1)	2 (1.4)
7	It seems to me that the society in which I live has a positive view towards this major.	90 (62.1)	37 (25.5)	13 (9)	4 (2.8)	1 (0.7)
8	Lecturers of this major encourage students to find appropriate jobs.	22 (15.2)	38 (26.2)	66 (45.5)	15 (10.3)	4 (2.8)
9	I think the legal benefits of employment in this field are appropriate.	44 (30.3)	56 (38.6)	30 (20.7)	12 (8.3)	3 (2.1)
10	I do not worry about the future of this field.	33 (22.8)	56 (38.6)	25 (17.2)	25 (17.2)	6 (4.1)
11	In my opinion, employment status in lower levels is better than higher levels.	3 (2.1)	9 (6.2)	30 (20.7)	53 (36.6)	50 (34.5)
12	After graduation from GP, I will continue studying at higher levels.	45 (31)	45 (31)	37 (25.5)	6 (4.1)	12 (8.3)
13	I am mistakenly accepted in this field.	3 (2.1)	5 (3.4)	11 (16)	28 (19.3)	98 (67.7)
14	Offered courses are practical and applicable in the workplace.	11 (7.6)	50 (34.5)	47 (32.4)	28 (19.3)	9 (6.2)
15	Provided training courses or educational content are proportional to the needs of society.	8 (5.5)	48 (33.1)	50 (34.5)	29 (20)	10 (6.9)
16	Courses and their content supply the employment requirements of my job in the workplace.	8 (5.5)	58 (40)	47 (32.4)	23 (15.9)	9 (6.2)

Discussion

78.6% of students in pre-clinical stage had good and very good attitudes towards their field of study and their future jobs. These results are comparable to similar previous studies. For instance, Sadr Arhami et al. indicated that 71 of students had a positive view towards their field of study (6). Moreover, findings are similar to the results taken at Tehran University of Medical Sciences (60%) (1). However, this is not consistent with Ghaderi et al.'s study, because in that study 53.3% of students had a negative attitude towards their field of study and the future of their education (11). The remarkable issue in the previous studies performed at medical universities in Iran such as Tehran, Isfahan, Qazvin and Jahrom was that the common outcome of all of them suggested that over time and while passing from pre-clinical to the physiopathology stage and from physiopathology to internship stage, students' attitude towards their field of study and their job prospect reduced seriously. Perhaps the reason for this is that internship students compared to the students of physiopathology and the students of physiopathology compared to the students of preclinical stage are more familiar with the hardships of the field; they also suffer from more psychological pressure and they have less leisure time.

More than 85% of students were satisfied with their selection of their field of study, which is consistent with the results obtained from Isfahan University (80.9%) (6). About 40% of those surveyed believed that the courses of preclinical stage were necessary for students; this is greatly different from the result obtained from Qazvin University (20.4%) (1), given that both results indicate that most students do not consider the current courses as necessary. The reason might be due to not briefing the students on the importance of the presented courses or professors' emphasis on ineffective details for medical students. 62% of students reported that after graduation, they were interested in continuing their education in specialized fields. This result is consistent with the results of medical universities of Qazvin (87%), Jahrom (51.3%) and Birjand (54%) (1, 7, 11).

The results indicated that the majority of medical students had selected their field because of its prestige and

economic value in the society. These are consistent with the results obtained in the Japanese medical universities. In a study conducted in Iran, it was concluded that social prestige, income and the social identity of a medical doctor were respectively the main reasons for choosing medicine as the field of study (12). These results support Hauer et al.'s study, indicating that two groups of factors were involved in the selection of a field of study and career in medical students: first, personal factors such as educational experiences; second, social status such as life style (13).

Limitation of this study includes the small sample size. Also, it must be considered that this research was conducted through questionnaires, and in questionnaire-based surveys validity may not be achieved fully and satisfactorily.

Conclusion

The majority of students had a positive attitude towards their field of study and future career. However, it must be noted that all studies have concluded that with a progress in the level of education of students, their positive attitude reduces. These issues include briefing the students on the affective dimension of the field and providing educational facilities and amenities to satisfy students' mental health. Another important result is lack of satisfaction with the lessons learned in the preclinical stage. The researchers also suggest to conduct this study comprehensively among students of physiopathology and internship levels in other medical universities.

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