

Attitudes of Operating Room and Anesthesia Students of Zabol University of Medical Sciences to Their Field of Study in 2018-2019

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Abstract

Introduction: Students' attitudes to the field of study can influence the quality and standards of health care. The aim of this study was to investigate the attitude of students, change the necessary policies, and provide appropriate educational models and solutions for students to continue the discipline with regard to the financial and human resources of the educational system in line with training the students during the course of study. **Method:** This is a descriptive-analytic cross-sectional study carried out on 126 operating rooms and anesthesia students of Paramedical faculty in the second semester of the academic year 2018-2019. The study was conducted by using a standard questionnaire to measure the students' cognition level and attitude toward their field of study. **Results:** According to the findings, the average of the total score obtained from the questionnaire of students' attitude towards the field of study and their interest in continuing education was 95.2% with a standard deviation of 10.27%. This means 30.2% of the students have a negative attitude to their field of study, while a significant relationship is found between the satisfaction with the major and the variables mentioned ($p < 0/05$). **Conclusion:** Due to the use and application of new technologies, the creativity and innovation in practical work by students and professors and the ability to acquire clinical skills in the hospital, it is necessary to enhance the above-mentioned issues in order to create a positive attitude among the operating room and anesthesia students.

Key words: Attitude, Students, Operating Room, Anesthesia

Introduction

Nowadays, the study of attitudes is an important social-psychological concept that occupies a special position in the research. Students' attitude to their field of study and their future career should always be considered by all countries' health officials of the educational and welfare system. Positive attitudes might increase students' satisfaction with their field of study, thus training a more efficient and interested workforce (Ghorbanpour, Talebi and Taghipour, 2018). Therefore, the growing number of medical sciences graduates which is a major concern in society leads to the students' anxiety and frustration about their career and future. Given the low level of people's positive attitudes, it seems that the authorities should plan to eliminate the existing barriers, as well as to encourage the students for their discipline (Marzban and Marzban, 2018). Since the number of students in higher education has increased in line with the development of higher education institutions and because many of the students are worried about their field of study and their future career, assessing their attitudes toward their major and future allows teachers and administrators to have effective planning in this area (Bahrami, Dehdashti and Karami, 2017). With such a condition, having a positive attitude to the future carrier and the major is one of the important factors for students' success (Khammarnia et al., 2017).

It is concluded that the most frequent academic failure is observed among the laboratory sciences students. However, since the study on the medical students' attitude towards their field with a focus on the major of laboratory sciences has not been done and because individual attitude to do the best is effective in job future (Ghaderi et al., 2016), an individual's attitude changes over the lifetime according to the environment. Studentship is an important stage through which individuals' attitudes change greatly. The impact of various factors on this period can lead to a positive or negative attitude among the students towards their field of study resulting in their

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achievement or leaving the university (Alizadeh and Cigarchian, 2014). Therefore, students' attitude to their area of study might have a significant impact on the education quality, eagerness to learn, and the use of clinical education principles. Also, the clinical experience as well as the failure to adapt students' expectations with what they face in reality may affect the nursing students' attitude towards the profession (Chehri et al., 2014). To promote training for professional attitudes, professional skills development for nurses as well as to evaluate the appropriate emotional needs in nursing students should be encouraged. Assessing expert attitudes towards nursing is critical because it can help identify barriers and correct the potential challenges of the career (Mutair and Redwan, 2016).

Numerous studies have been conducted on examining, enhancing, and modifying the attitudes through new technologies, creativity, innovation, and practical work as a policy tool, as well as on making appropriate changes to the educational programs and the creation of a good platform for clinical education. Therefore, regarding the current situation of the operating room and anesthesia disciplines, this study aimed to determine the positive or negative attitudes of the second to fourth year students of the operating room and anesthesia of Zabol University of Medical Sciences towards their study field.

Method

This is a descriptive-analytic cross-sectional study carried out on operating room and anesthesia students of Paramedical faculty of Zabol University of Medical Sciences in the second semester of the academic year of 2018-2019. Due to the limited statistical population, all of the students of the faculty (about 126) participated in the study. Willing to participate and taking the internship in the hospital were considered as the inclusion criteria. Unwillingness to complete the questionnaire and incomplete questionnaires were considered as the exclusion criteria. Also, for ethical reasons, the questionnaires were anonymous and the participants were free to complete or refuse to complete it.

Data was collected via a pre-designed questionnaire approved by specialist teachers. The data included demographic questions such as age, gender, marital status, educational semester and residency status. There were 33 questions in the form of the 5-point Likert scale (1-strongly disagree, 2-disagree, 3-indifferent, 4-agree, 5-strongly agree) to measure the students' attitudes toward their field of study. According to the professors and experts' comments, 4 questions were deleted from the questionnaire because of having low content validity.

According to the professors' views, the face and content validity of the questionnaire was good and more than 95% of the questions had a high correlation with the students' attitude. The total correlation coefficient was 0.70.

Cronbach's alpha and test-retest techniques were used to determine the reliability of the tool and to calculate the internal consistency. For this purpose, a pilot study was conducted on 20 randomly selected operating room students. Reliability of the questionnaire was 0.71 before deleting 4 questions, when it had inappropriate content validity. After the elimination, it was 0.89. Also, using test-retest technique, the correlation coefficient was obtained in the range of 0.73-0.79%. The data was analyzed via SPSS 21.

Results

According to the results, 43% of the total 126 students (54 students) were studying anesthesia and 57% (72 students) were studying operating room. Their demographic information is presented in Table 1. The mean of interest in the major is 95% and the standard deviation is 10.27, respectively. Anesthesia students had a higher positive attitude (97.11 ± 12.46) while operating room students had a lower level of positive attitude (94.9 ± 8.26) compared to the average.

Table 1: Frequency distribution of gender and marital status

Major	Gender		Marital status	
	Male	Female	Single	Married
Anesthesia	25	29	48	6
operating room	28	44	60	12

The mean age of the students was 20.71 ± 1.81 , of which 57.9% were female.

The results show that 34.2% of students are poorly interested in the field. The comparison of the attitude score to the interest in the discipline in terms of different age groups, gender, marital status and the average score of the last semester did not show any significant difference. However, there was a significant difference with regard to satisfaction among the students of the two majors and the mentioned variables ($p < 0.05$).

Table 2: Frequency distribution of students' interest in the field of study

Major	Attitude		
	negative	moderate	positive
Anesthesia	24.8	63.3	11.9
operating room	21	67	12

According to the results, the level of interest among the students of operating room was obtained as the following: 24.8% negative, 63.3% moderate and 11.9% positive attitude. It was obtained for anesthesia students as follows: 21% negative, 61% moderate and 12% positive attitude.

Based on the analysis of 72 operating room students, 84.7% of them and 72% of the anesthesia students (out of 54 students) were interested in continuing their area of study. The results show that the operating room students are more interested in their major than the students of anesthesia.

Among the items related to the attitude, the followings had the most frequency in "strongly agree", respectively:

"You have the ability to obtain the necessary clinical skills in this field"(80.6%);

"Students and instructors' creativity and innovation in practical work may increase the students' interest" (80.1%); and

"Has the use of new technologies had a good effect on learning the field?" (79.5%).

Table 3: Percentage of the highest scores for the items of strongly agree

Question	Score (%)
1. You have the ability to obtain the necessary clinical skills in this field.	80.6
2. Students and instructors' creativity and innovation in practical work may increase their interest.	80.1
3. Has the use of new technologies had a good effect on learning the field?	79.5

However, the following items had the most frequency in "strongly disagree", respectively:

"You cannot handle the responsibilities of this field"(29.4%);

"You have selected this major only to study at the university" (20.6%); and

"You were familiar with the major from high school before participating in the entrance exam" (16.7%)

Table 4: Percentage of the lowest scores for the items of strongly disagree

Question	Score (%)
1. You cannot handle the responsibilities of this field.	29.4
2. You have selected this major only to study at the university.	20.6
3. You were familiar with the major from high school before participating in the entrance exam.	16.7

Conclusion

Most of the students in operating room and anesthesia expressed a positive attitude toward their area of study. This is in line with the study by Shiva Alizadeh et al. on the attitudes of midwifery students at Islamic Azad University of Rasht (Alizadeh and Cigarchian, 2014), as well as with the study by Ali Gholami et al. on medical students of Neyshabur University of Medical Sciences (Gholami et al., 2014). In the study conducted by Adele Mobarabadi et al. on the attitude of the School of Public Health students, it was realized that most of them had a positive attitude toward their major (Mobarabadi, Shamsi and Najafian zade, 2013). But, Mahshid Bahrami and Dehdashti's study on the attitudes of public health students revealed a negative attitude among the majority of the students (Bahrami, Dehdashti and Karami, 2017). According to the research findings, there is a significant relationship between the satisfaction of operating room and anesthesia students and the mentioned variables. Mahdi Ghaderi et al. found a significant difference between the attitude toward the discipline and the academic semester (Ghaderi et al., 2016). However, in the study conducted by Amaneh Marzban et al., there was a significant difference considering the gender variable and the attitude among the nursing students of Hormozgan University of Medical Sciences (Marzban and Marzban 2018,). The present investigation on all of the students (126 students) in the operating room and anesthesia showed that on average, the students have a positive thinking which suggests a relative good level of interest in the area of study. This is in line with the results found by Arsalan Ghorbanpour et al. (2018). Hamzeh Ali Jamali et al. studied attitudes to the job future among the students in environmental health and recognized that it was lower than the acceptable level. Therefore, the authorities should plan a job background with changing the syllabus in order to reach empowerment and increase in students' positive attitudes. The results show that a lower percentage of students has a negative attitude toward their major.

Among the items related to the students' academic attitude, the item "You have the ability to obtain the necessary clinical skills in this field" has the highest levels of agreement, which suggests that the students have identified their ability to acquire clinical skills and they are more successful and effective in performing specialized tasks (health care), and ultimately are more interested in their job with positive attitudes toward it.

Next, the students had the highest agreement on the item "Students and instructors' creativity and innovation in practical work may increase their interest". In the today's world, given that universities are moving from the second-generation of research-based to the third generation of innovation, the creation of an idea leads to the students' creativity and ultimately entrepreneurship and innovation. It is necessary to work on the idea of creativity and innovation by improving the attitude and interest in the majors of operating room and anesthesia. This finding is of particular importance with regard to the conditions for changing the universities generation to the third-generation (innovative).

The next item with the highest agreement follows as: "Has the use of new technologies had a good effect on learning the field?". In the world of rapid changes especially in technologies used in the operating room, modern technologies are required to provide standard educational services for medical care, which will have a significant impact on students' learning and education for new the generation. This, in turn, raises the standards of health services.

The item "You cannot handle the responsibilities of this field" is one of the issues with a high level of disagreement. This is consistent with previous studies which shows that most of the students begin to study without any background knowledge. This suggests the great importance of counseling in high school (Ghaderi et al., 2016). The item "You have selected this major only to study at the university" revealed the second high-frequency disagreement, suggesting the lack of knowledge on the areas of operating room and anesthesia before entrance to the university. As seen, the majority of the students began to study only for continuing education at the university, and acquire an academic degree. And now, having known these disciplines, the majority stated a negative attitude with no interest in the field or its continuation. "You were familiar with the major from high school before participating in the entrance exam" is the next item with the high level of disagreement responses. Considering the personal ability of individuals (students) that is inherent, learning clinical skills and intervention in doing the job and educational tasks may enhance their attitudes.

According to the findings, more than half of the students had a positive attitude to their area of study. Therefore, it would be useful to examine students' attitudes in order to realize their reaction, social behaviors and interpretation before students behave in the studentship manner. Educational systems continue to experience disappointment from continuing education and dropping out of school due to dissatisfaction with the disciplines. In such a situation, the systems require adopting rational reasons and a strategy to maintain the students in order to prevent future health care systems with a lack of force and standards. Given the rapidly changing world, such a strategy requires the use of new educational technologies, creativity and innovation in practical work by students and professors, as well as the ability to acquire clinical skills in the hospital. In this way, the suitable platform for creating positive attitudes will be provided for the students studying in operating room and anesthetics.

Recommendation for further study

Considering whatever mentioned, in order to increase the value of the results, it is suggested to conduct similar studies on different samples with bigger size. This is because through the analysis of results from numerous studies in different universities and health centers, correct and reasonable findings will be achieved with regard to the students' attitude toward their majors.

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