



Evaluation of satisfaction of senior postgraduate students of oral and maxillofacial surgery with the specialty curriculum during the 2016–2017 educational year

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ABSTRACT

Objective: Evaluation of the quality of education and the relevant curriculum is one of the most important steps for optimizing the educational process. One of the ways to address the quality control is to continuously assess the postgraduate students' opinions. This study aimed to evaluate satisfaction of senior postgraduate students of oral and maxillofacial surgery with the specialty curriculum.

Materials and Methods: The target population in the present cross-sectional study consisted of all the senior postgraduate students in the field of oral and maxillofacial surgery all over Iran during the 2016–2017 educational year. The research questions consisted of 3 questions on demographic variables and 23 on educational variables, the characteristics of clinical education (including physical conditions and the number and varieties of the patients), the possibility of access to academic sources, the independent activity of post graduate students in taking history, the quality of educational activity of the professors, the quality of hospital wards and their interest in their field of study.

Results: The mean age of the post graduate students was 32.4 ± 3.8 and 93.5% were male. Among the post graduate students, 58.1% were fully satisfied and 41.9% were moderately satisfied with the curriculum. A total of 64.5% of the post graduate students were fully satisfied with theoretical lessons, while 32.3% and 3.2% exhibiting moderate and low satisfaction rates, respectively. For practical training, 61.3% of the post graduate students were fully satisfied and 38.7% exhibited a moderate level of satisfaction. In clinical training, 7.38% of the post graduate students reported full satisfaction, while 58.1% and 3.2% reporting moderate and low rates of satisfaction, respectively. A total of 58.1% of the post graduate students were moderately satisfied with the facilities available and 41.9% reported a low satisfaction rate. Satisfaction was the same among females and males.

Conclusion: Since the educational curricula and the educational facilities have been designed for high-quality education of the post graduate students, it is necessary to take the necessary steps to revise the curricula and improve the educational facilities.

Keywords: Educational curriculum; Oral and maxillofacial surgery; Satisfaction.

Introduction

The chief aim of university and educational centers is to train specialists and skilled professionals for the community. The educational system, too, like

any other system might be affected by problems and deficiencies and might not be able to fulfill its responsibilities, resulting in the loss of financial resources and failure to

achieve favorable results [1]. Therefore, it is very important to become aware of the problems, devise programs, revise them and pay attention to the quality of education in order to achieve the chief goals of educational centers [2,3].

Medical sciences universities are considered the most principal academic educational centers in Iran and all over the world. These universities are responsible for training specialists in the medical field, who can understand and solve the individual and social problems of patients after acquiring the necessary knowledge, skill and attitudes for the care and treatment of patients [4,5]. Such skills and trainings should be able to translate theoretical knowledge into mental and practical skills for the care and treatment of patients [6]. Therefore, it is absolutely necessary to evaluate the opinions of students in this field in order to become aware of the educational status in different fields in order to be able to promote the quality of education.

An increase in the number of dental schools/faculties and an increase in the number of postgraduate students somehow create problems in relation to the quality of education in this field. In this context, the field of oral and maxillofacial surgery, too, considering its special conditions (theoretical and practical training in the faculty and hospital), requires special attention and considerations. As an example, some faculties have accepted the responsibility to train postgraduate students but they do not have the basic facilities for such a task. The present study was undertaken to determine satisfaction of postgraduate students in oral and maxillofacial surgery with specialty curriculum in order to collect data and offer suggestions to improve the education and services offered to such students and to promote the efficacy and increase satisfaction rate of students.

Materials and Methods

The target population in the present descriptive/cross-sectional study was all the senior postgraduate students of oral and maxillofacial surgery in all the Medical Sciences Universities in Iran during the 2016–2017 educational year. The research questions consisted of 3 questions on demographic data (including gender, age and the year of admission into the university) and 23 questions on educational variables, clinical education characteristics (such as the physical environment and the number and varieties of patients), the possibility of access to academic sources, the post graduate students' (PGs) independent activity in tak-

ing history, the quality of the educational activity of the professors, the quality of hospital wards and the PGs' interest in their field of study. The validity of the questionnaire was determined by Faculty members of Qazvin University of Medical Science. in a qualitative way. Cronbach's alpha ($=0.8$) was used to determine the reliability of the questionnaire. Data were analyzed with SPSS. One of the researchers participated in the Annual Congress of Maxillofacial Surgery and after gaining informed consent from the PGs in this field, submitted the questionnaires to them and collected them after the PGs completed them. The PGs' opinions about their satisfaction with specialty curriculum were evaluated based on the 5-score Likert Scale from fully satisfied (a score of 5) to very poorly satisfied (a score of 1). The score range was 32–160, with the following classification:

32–75: poor satisfaction rate

76–118: moderate satisfaction rate

119–160: high satisfaction rate

Data were analyzed with SPSS 24. Descriptive and frequency analysis was done and Pearson correlation calculation was implemented in order to know about the associations between demographics and satisfaction.

Results

The subjects consisted of 31 senior PGs in the field of oral and maxillofacial surgery, whose satisfaction with the relevant course's postgraduate curriculum was evaluated. Of all the subjects included in the present study, 93.5% were male. The age range of the subjects was 27–46 years, with a mean and standard deviation of 32.4 ± 3.8 years. A total of 71% of the PGs were satisfied with the fellowship program and 71% believed that the fellowship program had no negative effects on the process and number of surgeries. All (100%) of the PGs confirmed that they would again choose oral and maxillofacial surgery if they were given a second chance. The highest satisfaction rate was related to the department of neurocerebral surgery and the lowest was related to the department of plastic surgery (Table 1). The highest satisfaction of the PGs with the educational curriculum was related to acquisition of grafts from the ribs, pelvis and skull, maxillofacial infections and the lowest rate of satisfaction was related to tracheostomy (Table 2). A total of 64.5% of the PGs were thoroughly satisfied with theoretical educational programs; 32.3% were moderately satisfied, and 3.2% reported a low rate of satisfaction. In relation to theoretical edu-

cation, the lowest rate of satisfaction was reported from Yazd University of Medical Sciences and the highest rate of satisfaction was reported from Mashhad, Ahwaz and ShahidBeheshti Medical Sciences Universities and Azad University, Tehran Branch (Table 3).

A total of 61.3% and 38.7% of PGs reported high and moderate rates of satisfaction with practical training, respectively. The highest satisfaction rates were related to Mashhad, Shahid Beheshti, Isfahan, Shiraz and Tabriz Universities of Medical Sciences and the lowest satisfaction rates were related to Ahwaz and Hamadan Universities of Medical Sciences (Table 4). A total of 38.7% of the PGs reported a high rate of satisfaction, with 58.1% and 3.2% reporting moderate and low rates of satisfaction with clinical education, respectively. The

highest satisfaction rates were related to Mashhad, Shiraz and Tabriz Universities of Medical Sciences and the lowest satisfaction rate was related to Hamadan University of Medical Sciences. Overall, 58.1% and 41.9% of the PGs reported moderate and low rates of satisfaction with the facilities available, respectively, with the highest rate being related to Mashhad, Shahid Beheshti, Ahwaz, Shiraz and Tabriz Universities of Medical Sciences and the lowest to Isfahan and Yazd Universities of Medical Sciences. A total of 58.1% and 41.9% of the PGs reported high and moderate rates of satisfaction with the educational curriculum, respectively. Please add a statistical analysis according to demographics.

Satisfaction Ward	Very low		Low		Moderate		High		Very high	
	No.	%	No.	%	No.	%	No.	%	No.	%
ENT	1	3.2	6	19.4	6	19.4	11	35.5	7	22.6
Internal, cardiopulmonary	0	0	0	0	7	22.6	9	29	15	48.4
Neurocerebral surgery	0	0	0	0	6	19.4	4	12.9	21	67.7
General anesthesia	1	3.2	0	0	10	32.3	11	35.5	9	29
Plastic surgery	2	6.5	10	32.3	6	19.4	4	12.9	9	29
Ophthalmology	1	3.2	5	16.1	12	38.7	10	32.3	3	9.7

Table 1. The relative frequencies of satisfaction rates of the post graduate students with education in hospital wards.

Satisfaction \ Surgery	Very low		Low		Moderate		High		Very high	
	No.	%	No.	%	No.	%	No.	%	No.	%
Orthognathic surgeries	1	3.2	3	9.7	2	6.5	13	41.9	12	38.7
Maxillofacial traumas	0	0	5	16.1	3	9.9	9	29	14	45.2
Maxillofacial infections	0	0	2	6.5	4	12.9	12	38.7	13	41.9
Maxillofacial reconstructive surgeries	2	6.5	3	9.7	4	12.9	12	38.7	10	23.3
Esthetic surgeries	0	0	3	9.7	12	38.7	13	41.9	3	9.7
Pathologic lesions	2	6.5	1	3.2	6	19.4	12	38.7	10	23.3
Treatment of malignancies and cervical surgeries	0	0	7	22.6	9	29	8	25.8	7	22.6
Tracheostomy	10	32.3	11	35.5	8	25.8	2	6.5	0	0
Acquisition of grafts from ribs, pelvis and skull	0	0	1	3.2	4	12.9	9	29	17	54.8
Implant surgeries	0	0	4	12.9	3	9.7	12	38.7	12	38.7

Table 2. The relative frequencies of satisfaction rates of the post graduate students with the surgeries specified in the educational curriculum.

Satisfaction \ Location	Low		Moderate		High	
	No.	%	No.	%	No.	%
Tehran	0	0	2	66.7	1	33.3
Tehran Azad University	0	0	3	100	0	0
Shahid Beheshti	0	0	0	0	3	100
Isfahan	0	0	0	0	3	100
Isfahan Azad University	0	0	2	100	0	0
Mashhad	0	0	0	0	3	100
Shiraz	0	0	0	0	3	100
Yazd	0	0	2	66.7	1	33.3
Kerman	0	0	1	100	0	0
Ahwaz	0	0	1	50	1	50
Hamadan	0	0	1	50	1	50
Tabriz	0	0	0	0	2	100
Babol	0	0	1	100	0	0

Table 3. The relative frequencies of the post graduate students' satisfaction with educational program separately for each university.

Satisfaction Location	Low		Moderate		High	
	No.	%	No.	%	No.	%
Tehran	0	0	2	66.7	1	33.3
Tehran Azad University	0	0	3	100	0	0
Shahid Beheshti	0	0	0	0	3	100
Isfahan	0	0	0	0	3	100
Isfahan Azad University	0	0	2	100	0	0
Mashhad	0	0	0	0	3	100
Shiraz	0	0	0	0	3	100
Yazd	0	0	1	33.3	2	66.7
Kerman	0	0	1	100	0	0
Ahwaz	0	0	1	50	1	50
Hamadan	0	0	1	50	1	50
Tabriz	0	0	0	0	2	100
Babol	0	0	1	100	0	0

Table 4. The relative frequencies of satisfaction rates of the post graduate students with practical training separately for each university.

Discussion

The present study is the first one to comprehensively evaluate the satisfaction of senior oral and maxillofacial PGs in all the medical sciences universities all over Iran with the specialty course curriculum. The study was carried out during the 2016–2017 educational year. We hope the results of the present study would provide useful data on the educational curriculum of the postgraduate course in oral and maxillofacial surgery so that any deficiencies and shortcomings in the curriculum would be resolved and the needs and requests of the PGs would be taken into account. We believe the results of this study will help the authorities and policy-makers in universities promote the quality of education in this specialty field.

Based on the results of the present study, 58.1% of the PGs were highly satisfied with the curriculum and 41.9% reported a moderate rate of satisfaction; 64.5% of the PGs reported a high rate of satisfaction with theoretical courses and 32.3% and 3.2% reported moderate and low rates of satisfaction, respectively. In relation to theoretical courses, the least satisfaction rate was reported in Yazd University of Medical Sciences; 61.3% of the PGs reported a high rate of satisfaction with practical training and 38.7% reported a moderate rate of satisfaction. In relation to practical training, the least satisfaction rate was reported from Tehran Uni-

versity of Medical Sciences. Fasihi Harandi carried out a study to evaluate the quality of clinical training based on the opinions of medical students in Iran University of Medical Sciences in 2008 and reported a relatively favorable level of quality [7]. In a study by Mirmohammadi et al in 2013, the satisfaction rate of the graduates with the general medicine curriculum in Shahid Sadoughi University of Medical Sciences in Yazd was evaluated. In relation to clinical training, the graduates were satisfied with the quality of training and they also reported satisfaction with the professors' punctuality and order in attending the classes. It was concluded that the quality of educations in Yazd University of Medical Sciences was favorable based on the opinion of the university graduates [8].

Rokhsarizadeh et al (2000) reported a score of 4.3 (of a maximum score of 5) for the achievement of educational goals in the Internal Medicine Department in Baqiatollah Hospital in Tehran based on the opinions of the students, indicating a moderate level of achievement of educational aims [9]. The results of the present study showed that in relation to practical training in hospitals, the highest rate of satisfaction was related to neurosurgery surgery department, with the least belonging to plastic surgery department. Dissatisfaction with plastic surgery department might be attributed to the lack of proper planning and educational programs.

In relation to the surgeries depicted in the educational curriculum, the highest satisfaction rate of the PGs was related to acquisition of grafts from the ribs, the pelvis and the skull and surgeries for maxillofacial infections; the lowest satisfaction rate was related to tracheostomy. The most frequent surgeries carried out by the resident are orthognathic surgeries and those due to traumas. The lower frequency of esthetic surgeries done by the PGs might be due to fewer esthetic procedure applicants to public hospitals. In a study by Attarian et al in 2014 in Qazvin University of Medical Sciences, the highest satisfaction rate among the major groups was related to internal medicine and general surgery wards, with 25.75% and 25.7% satisfaction rates, respectively; the lowest satisfaction rate was related to the pediatric ward with 2.9% [10]. In relation to clinical training, 38.7%, 58.1% and 3.2% of the PGs reported high, moderate and low rates of satisfaction, respectively. In this field, again, the lowest satisfaction rate was related to Yazd University of Medical Sciences. In relation to educational facilities, 58% and 41.9% of the PGs reported moderate and low rates of satisfaction, respectively. The lowest satisfaction rates were related to Azad University Tehran and Isfahan Branches and Yazd and Isfahan University of Medical Sciences. The low satisfaction rates in the universities above might be attributed to the casual establishment of some specialty training groups and courses all over the country.

In another part of the present study the PGs' satisfaction with the number of postgraduate students admitted into this field was evaluated; 45.2%, 41.9% and 12.9% of the PGs believed that the number of the students admitted was very high, high and favorable, respectively. It is necessary to more accurately evaluate the proportionality of the postgraduate students admitted into this field. Another evaluation was related to the satisfaction of the PGs with the fellowship program; 71% of the PGs were satisfied with the fellowship program and 71% believed that the fellowship program had no negative effects on the number of surgeries carried out during the specialty course. Finally, the PG-sinterest in maxillofacial surgery field was evaluated and 100% of the PGs reported that they would again choose this field if they were given a second chance.

Conclusion

Since the educational curricula in different specialty fields are designed in order to impart the necessary knowledge and skills to the graduates in each field and provide high-quality services in the community, it is

necessary to evaluate the efficacy of such curricula at different stages and the necessary amendments should be made. Given the deficiencies in some aspects in relation to hospital education, e.g. In the field of plastic surgery, further attention is necessary in such areas. On the other hand, given the increase in the number of faculties that are eligible to admit postgraduate students, it is advisable to first provide the basic facilities for each field of study and then admit students.

Conflict of Interest

There is no conflict of interest to declare.

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