

Residents' Satisfaction in Oral and Maxillofacial Surgery program in Syria during the crisis

Research Article

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Abstract

During the ongoing crisis that has been started in Syria since 2011, the medical education has been deeply affected. The oral and maxillofacial surgery (OMFS) specialization is one of many other medical specialties that have underwent many restricted chains that disabled it from moving forward. Accordingly, and due to the lack of data related to this aspect of the specialization in Syria, we conducted this research to observe the strengths and weaknesses points in the program, in order to develop a future vision about the specialization in the country and the methods of improving it.

Aim of the study: to evaluate the satisfaction of residents in oral maxillofacial surgery (OMFS) in Syrian hospitals and universities during the crisis.

Study design: A survey included questions related to the satisfaction of students in the residency program. The questions mainly focused on female discrimination, satisfaction in the program as to constructive feedback as well as to the presence of surgical equipment.

Results: fifty-nine responses were included; 62.7% male and 37.3% female. Participants' satisfaction rate was not that good. Female discrimination; 57.7% revealed that OMFS is not competent for female. 72.9% believed in the presence of no teamwork environment.

Conclusion: the specialty of maxillofacial surgery in Syria suffers from a lot of problems that require many changes that will improve the specialty.

Keywords: Oral and Maxillofacial Surgery; Residency; Syria; Satisfaction.

Introduction

Oral and maxillofacial surgery is considered as one of the most important specialization in dentistry. Attending to OMFS post-graduate program varies across the world, depending on the conditions for admission to this specialty and the number of training years that the resident must complete. In Germany for example, the condition for applying is that the applicant must hold dual competence (medicine and dentistry) [1], Whereas in Russia [2] it is sufficient for the applicant to have a degree in dentistry followed by a year of training before starting the specialization. On the contrary, in France [3] applicant must exclusively have a medicine certification. While in Syria, it suffices to have a degree in dentistry [4].

Amounted studies evaluated the residency program, mainly as to female discrimination. As to Zeller et al, residents' satisfaction in OMFS is good although there is a female discrimination [1]. In other studies participants expressed that this specialty is more suitable for males than females. Women (residents) who participated in a study showed that women possess high competencies that make them more suitable for this specialty, but they are subjected to inferiority and female surgeons are less represented in the specialty in terms of supervisors and mentors [5, 6]. As to assessment methods and with the advent of competency-based medical education (CBME), an urgent need emerged for effective work-based assessment (WBA) that can improve the process and decision-making during work or intervention on the patient and

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using simulation methods and practical stations to assess residents' technical skills [7, 8].

Accordingly, and due to the lack of data related to this aspect of the specialization in Syria, we set out to do this research to monitor the strengths and weaknesses points of OMFS residency program in Syria, in order to develop a future vision about the reality of the specialization and the methods of developing and improving it.

Materials and Methods

The study population included a representative sample of students residing in oral and maxillofacial surgery in Syria. A closed questionnaire composed of 6 questions focused mainly on current situation in the training program. We used Likert-tool scale of five scores (totally agree/agree/neutral/disagree/totally disagree). In addition to demographic questions (gender, marital status, current training year (table1).

The positive questions (in table 1: 2,3,4,5,6) were given a value 5,4,3,2,1 in accordance with totally agree, agree, neutral disagree, totally disagree. While the questions with negative meaning (in table1: 1) were given a value 1,2,3,4,5 in accordance with totally agree, agree, neutral disagree, totally disagree.

Ethical approval:

We have got ethical approval in order to start his research from scientific committee in faculty of dentistry Damascus university (No: 1512201115)

Validation of content:

The questionnaire was reviewed by two professors from the staff in Damascus university (table 2)

Then the questionnaire were sent via electronic link to the resident chief in each OMFS departments in Syrian universities and hospitals in order to distribute it to the residents (during December 2020). We collected responses after two months and closed the questionnaire (February 2021).

Data were extract into SPSS program (SPSS-IBM, edition 26) to make the statistical analysis.

Results

A total 59 response was collected, 37 male and 22 female. The distribution of the sample accordingling with the year of recidency (1,2,3,4,5) was 18.6%, 10.2%, 20.3%, 18.6% and 32.2% respectively.

The responses agreed with the statement related to the discrimination againts women in this spicialaization, majority of participatns agrred to the fact the OMFS is more suitable for male than female(table 3).

Participates indicated to the lack of sufficient surgical equipment that are required in the surgical theatre. While the responses were positive to the statement related to justice in shifts disturbance. On the other hand, when they were asked if they work on their own (beliving in team working), most of them agree to this statement (34 agree, 9 totally agree) which means they do not have the environment of team working in their recidency program (table 4).

Mann-Whitney test showed that the difference is statistically significant between male and female as to the discriminationm while there is not as to the feedback (table 5).

As it is shown in (table 6), there is no statistic difference as to discriminationm surgical equipment avaiablity and team working,

Table 1. Contents of closed questionnaire (6 questions)m preceded by demographic questions.

Gender
Current training year
Marital status
1. I think that this specialization in more suitable for male than female
2. The department is provided with all required surgical equipment
3. Shifts are fairly distributed between residents
4. We get a constructive feedback
5. Assessment tools are effective and miscellaneous
6. Working is mainly based on team work

Table 2. The staff that participated in questionnaire validation in the study

Name	Specialization	Email address
Prof. ArwaKhier	Oral endodontic	Dr.arwakhir@gmail.com
Prof. MirzaAllaf	Fixed prosthodontics	Dr.mirzaallaf@gmail.com

Table 3. Participants response as to the discrimination.

		Frequency	Percent
Value	1	9	15.3
	2	25	42.4
	3	11	18.6
	4	6	10.2
	5	8	13.6
	Total	59	100

Table 4. Participants response to the closed questionnaire (from 1 totally disagree to 5 totally agree).

value		availability of surgical equipment	shifts disturbance	believing in team working
	1	13.6	3.4	3.4
	2	49.2	13.6	15.3
	3	20.3	22	8.5
	4	16.9	40.7	57.6
	5	0	20.3	15.3
	total	100	100	100

Table 5. Comparison between male and female as to the discrimination and feedback.

	Discrimination	Feedback
Mann-Whitney U	270.5	382
Wilcoxon W	973.5	635
Z	2.196	0.409
Asymp. Sig. (2-tailed)	0.028	0.683
	sig	No sig.

Table 6. Results of Kruskal-Wallis Test for a comparison of frequencies as to discrimination, surgical equipment and team working.

	Year of training	Discrimination	Surgical equipment	Team working
Chi-Square	20.42	5.527	1.783	7.154
df	4	4	4	4
Asymp. Sig.	0	0.237	0.776	0.128
	Sig	No sig	No sig	No sig

among groups divided as to the year of training.

Discussion

The sample consisted of fifty-nine participants. The participants in our study were mostly males (62.7%). This agrees that most specialists in Syria are males. Most of participants expressed their perception that the specialty is more suitable for males than females (57.7%). We explain this high percentage by society's view in general for work that requires high effort or too long shifts. It is more suitable for males than females, which our society so far sees as suitable for office work and simple specializations in order to be able to take care of her family and allocate enough time for them. This view may be general in all societies and is not limited to the Syrian society, and this is what we find in other studies that dealt with the inadequacy of surgery for females, and this may

explains why females residency in some countries are subjected to bias in choosing this specialty [1, 5, 6].

A large percentage of the participants expressed the lack of materials needed for surgical work. This result can be explained by the lack of many medical supplies in our hospitals in the recent period, as a result of the conditions that our country recently experienced and the siege imposed by many countries on Syria, This prompted hospital administrators to secure basic materials such as treatments, anesthesia tools, and medicines, and to give them priority over other tools such as gloves, masks, or even simple surgical tools that every surgeon routinely owns.

On the other hand, residents' responses according to the result of the questionnaire, revealed that there is not periodic meeting with professors to evaluate these works and thus evaluate the progress

of the residents, and this is one of the main weaknesses in any educational program as the lack of feedback. As feedback is an essential component of clinical teaching and is necessary for the development of the learner. Literature indicates that it is useful to consider a three-level conceptual framework for feedback that includes the characteristics of the learner, the characteristics of the feedback and the culture of feedback [9, 10]. Today, the Accreditation Council for Medical Education for Graduates in the United States explicitly requires that residency programs in the United States include feedback into routine practice and provide each trainee with a semi-annual performance evaluation through feedback. The Royal College of Physicians and Surgeons of Canada sets accreditation standards for all programs. Canadian graduate training, similar requirements for feedback. [11].

A large percentage of residents have suffered from the assessment tools in their program, they indicate that assessment is an ineffective and unfair method. The reason for this result may be due to the nature of the exams in our country, which generally rely on essay questions that only explore the student's memorization abilities (knowledge), without assessment of the student's skills and attitude. When reviewing the medical literature, we do not find reliable methods of assessing applied skills in the medical sciences. The assessment methods are generally based on multiple-choice questions or essay questions (to assess knowledge) or oral interviews (to assess decision-making ability in clinical matters). These methods are usually compared with American Board examinations, Canadian Board examinations, Asian Board examinations, and European Board examination in surgery. The European Board of Oro-Maxillo-Facial Surgery Recognition of Qualification Assessment (EBOMFS RQ; Europe), therefore studies today apply new evaluation methods and compare them with traditional methods in order to improve or change the evaluation process in medical specialties [8, 12].

Conclusion

Oral and maxillofacial surgery specialization in Syria suffers from many weakness in the structure of the specialization. The results of our study indicate that the future is open to many challenges in order to make concrete improvements in this specialization, the most prominent of which is reconsidering the methods of admission and the current methods of evaluation as well as exerting more efforts and drawing up plans to secure the necessary materi-

als for the training of residents.

References

- [1]. Zeller, A.N., et al., Training in oral and maxillofacial surgery in Germany-residents' satisfaction and future challenges. *Journal of cranio-maxillofacial surgery*, 2020.
- [2]. Rane T, Taha S, Nasser F. A look at current oral and maxillofacial surgery (OMS) training requirements in comparison to 1994. *J Oral Maxillofac Surg Med Pathol*. 2015 May 1;27(3):328-31.
- [3]. Herlin C, Goudot P, Jammot P, Delaval C, Yachouh J. Oral and maxillofacial surgery: What are the French specificities?. *J Oral Maxillofac Surg*. 2011 May 1;69(5):1525-30.
- [4]. SBOMS. oral and maxillofacila surgery in Syria 2021 [cited 2021 2021]; Available from:
- [5]. Abu-Hammad S, Elsayed SA, Nourwali I, Abu-Hammad O, Sghaireen M, Abouzaid BH, et al. Influence of gender on career expectations of oral and maxillofacial surgeons. *J Craniomaxillofac Surg*. 2020 Apr;48(4):458-462. Pubmed PMID: 32184074.
- [6]. Baptiste D, Fecher AM, Dolejs SC, Yoder J, Schmidt CM, Couch ME, et al. Gender differences in academic surgery, work-life balance, and satisfaction. *J. Surg. Res*. 2017 Oct 1;218:99-107.
- [7]. Holmboe ES. Work-based Assessment and Co-production in Postgraduate Medical Training. *GMS J Med Educ*. 2017 Nov 15;34(5):Doc58. Pubmed PMID: 29226226.
- [8]. Caminiti MF, Driesman V, DeMontbrun S. The Oral and Maxillofacial Objective Structured Assessment of Technical Skills (OMOSATS) examination: a pilot study. *Int J Oral Maxillofac Surg*. 2021 Feb;50(2):277-284. Pubmed PMID: 32694035.
- [9]. Kornegay JG, Kraut A, Manthey D, Omron R, Caretta-Weyer H, Kuhn G, et al. Feedback in medical education: a critical appraisal. *AEM Educ. Train*. 2017 Apr;1(2):98-109.
- [10]. Kumar S. Training Pathways in Oral and Maxillofacial Surgery Across the Globe-A Mini Review. *J Maxillofac Oral Surg*. 2017 Sep;16(3):269-276. Pubmed PMID: 28717283.
- [11]. Telio S, Ajjawi R, Regehr G. The "educational alliance" as a framework for reconceptualizing feedback in medical education. *Acad Med*. 2015 May;90(5):609-14. Pubmed PMID: 25406607.
- [12]. Bi M, Zhao Z, Yang J, Wang Y. Comparison of case-based learning and traditional method in teaching postgraduate students of medical oncology. *Med Teach*. 2019 Oct;41(10):1124-1128. Pubmed PMID: 31215320.