DENTAL EDUCATION IN DAMASCUS UNIVERSITY: A CRITICAL ANALYSIS AND A SUGGESTED ROADMAP FOR ACCREDITATION

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Abstract

Damascus University aspires to build key strengths in research quality, teaching quality, graduate employability and internationalization. A new policy has been adopted to improve the quality of higher education through reforming the academic, administrative and society outreach aspects of higher education. Faculty of Dentistry was a pilot institution that accepted to be part in the quality assurance process adopted by the University. A critical analysis to the current situation of dental education was performed. Several studies have been undertaken to help assessing the current curriculum delivered. The international trend in dental education was explored in order to assess the possibility of adopting the requirements of association of dental education in Europe ADEE. This paper demonstrates the need for curriculum transformation through critically analyzing the current situation. It also demonstrates the need to adopt few characters that formulate the identity of dental graduate in Damascus University and makes him/ her different from those graduated from other Syrian faculties. The paper also describes a roadmap that can facilitate correcting the points of weakness and enhance the points of strength to help the faculty in achieving accreditation.

Keywords: Dental Education, Accreditation, Damascus University.

1 INTRODUCTION

Damascus University aspires to build key strengths in research quality, teaching quality, graduate employability and internationalization. The university is dedicated to develop academic, scientific and education competences of a university. Therefore, a new strategic plan has been adopted to improve quality of education through reforming the academic, administrative and society outreach aspects of higher education. A great opportunity has been offered to faculties to set out and analyze their own practice and to improve the quality of their education.

The strategic plan aims to take the two main approaches[1]. The top-down approach, those initiatives taken by the university and determined by its leadership, and the bottom-up approach, in which the initiatives taken by academic members in the faculty to improve the quality of their graduates. These two approaches were adopted to emphasize the interplay between members of university, commitment of senior leadership, and involvement of faculty members and students.

Faculty of Dentistry was a pilot institution that accepted to be part in the quality assurance process adopted by the University. A critical analysis to the current situation of dental education was performed. This paper demonstrates the need for curriculum transformation through critically analyzing the current situation. It also demonstrates the need to adopt few characters that formulate the identity of dental graduate in Damascus University and makes him/ her different from those graduated from other Syrian faculties. The paper also describes a roadmap that can facilitate correcting the points of weakness and enhance the points of strength to help the faculty in achieving accreditation[2].

2 CRITICAL ANALYSES

The Educational strategies, teaching, learning and assessment methods that are currently employed in the faculty were evaluated. A stakeholder meeting was held in order to discuss the need for reforming the curriculum. Several studies were undertaken to investigate the attitude of dental graduates towards the current delivered curriculum, the attitude of students towards learning "English in Dentistry" and the attitude of patients towards preventive and treatment procedures undertaken by the faculty.

The findings have provided evidence that students lack some essential skills which are not well considered in the current curriculum:-

- The curriculum of the faculty is traditional in that it is teacher-centered, discipline- and hospital-based.
- Emergency care and practical training in biomedical science are not part of curriculum.
- Problem-based learning (PBL) and clinical problem solving approaches are still in their fetal stage and are not strongly emphasized.
- Critically Appraised Topics (CAT) is not part of the programme.
- Practice in community clinics or outreach clinics are only available through two weeks camping in communities that suffer from insufficient healthcare services.
- New teaching and learning methods such as "enquiry-based" learning, "case-based" activities, "course-assisted" learning, and use of "web-based" resources do not have a major role in learning and are not part of the programme.
- Research undertaken is significant. The research portfolio is capable of promoting excellence, but a strategic approach is not present.
- There is no sound understanding between the Syrian Dental Association, Syrian specialist dental societies, and the Faculty to ensure a continuing dialogue related to their expectations of the graduate's skills and competence to practice dentistry safely in Syria.
- No sound role of dental students, patients and dental employers in the process of curriculum reform.
- Syrian education leaders believe that educational programs should be delivered in Arabic and adopting Arabic in educational system would be fundamental to the society cohesion and identity. This has given the faculty's program respect, reputation, regional and local recognition.
- The majority of students agreed that the curriculum should be delivered in Arabic. However, they wanted Arabic textbooks to be produced in better quality in terms of translation or publication, they required to learn academic Arabic writing to publish in Arabic Journals and wanted the current 'English in Dentistry' to be improved in order to be able to develop their scientific standards, read, write and appraise scientific articles, attend and present in international conferences, study and set international exams and understand English speaking visitors[3].
- Sufficient time for teaching and learning 'English in Dentistry' is not well allocated and new teaching and learning methods are not available [3].
- The majority of patients are satisfied with free preventive and treatment procedures offered by the departments investigated. However, they stressed the need to improve facilities, infrastructure, waiting time, allocated time for each patient, environment of reception and operating field.
- Stakeholders stressed the need to undertake the necessary measures by the faculty to improve the delivered programme in response to continued changes in dental

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knowledge; materials and equipments; methods of delivering oral health care; demands of dental students and graduates; and the ever-changing expectations of society for oral healthcare.

• Stakeholders addressed the issue of continuous professional development, and improving teaching and learning methods in order to create a new dental curriculum which emphasizes evidence-based dentistry.

The critical analysis have provided evidence about the need for new appropriate curriculum that best fulfills the faculty mission and stakeholders' requirements to achieve excellence in producing competent dentist who is fit for 21st century and can fulfill the requirements of leading dental schools in the world.

3 INTERNATIONAL TRENDS IN DENTAL EDUCATION

The international trend in dental education was explored in order to assess the possibility of adopting the requirements of association of dental education in Europe ADEE. All related articles have been uploaded in the website of quality assurance. The following issues have been studied:

* The Bologna Declaration and its merits in converging and harmonizing the higher educational systems in line with the European countries.
* The role of the "Thematic Network (TNP) DentEd" funded by the EU in converging and harmonizing the various dental curricula, and for transferring expertise and activities, including site-visitation and quality assurance systems, to the "Association for Dental Education in Europe" (ADEE), [4].
* The new model of curricular structure in dentistry developed by ADEE and DentEd[5 which is organized in modules according to the European Credit Transfer System "ECTS" [6].
* The ADEE and DentEd 14 requirements for quality assurance in dental education and their 'toolkit' which was developed for supporting dentistry faculties for meeting these requirements [7].
* Visitations offered by ADEE to dental schools both within and outside Europe according to the principles of DentEd, an EU funded thematic network on dental education and evaluation reports of Ankara, Yeditepe, Gazi, Jadah, Kuwait and Moscow.
* The Profile Competence Document (PCD) which was revised in 2008 and published in the ADEE website after consulting National and European Dental Associations[8].
* The profile of the new European dentist and its implications on the contents of the curriculum of the faculty of Dentistry in terms of graduating a dentist who:

    o has a broad academic and dental education and able to function in all areas of clinical dentistry
    o trained in biomedical science
    o able to work together with other dental and health care professionals in the health care system
    o has good communicative skills
    o prepared to undertake continuing professional development supporting the concept of life-long learning
    o able to practice evidence-based comprehensive dentistry based through a problem solving approach, using basic theoretical and practical skills.

The assessment of the international trends, requirements of Association of Dental education in Europe ADEE, findings of research undertaken in the faculty have provided evidence that students lack some essential skills. The current traditional curriculum needs to be reformed to integrate basic, medical and dental sciences both vertically and horizontally. Student-centered learning should be offered to inspire students to become life-long learners and critical thinker. Evidence-based dentistry and research project should be integral part of the dental curriculum in order to achieve excellence in producing graduate who can integrate critical thinking, evidence based, research and lifelong learning skills into everyday practice. Resuscitation

training should be compulsory, practical and repeated. This would produce competent dental graduate who has experience in medical emergency and medical diseases related to dentistry.

4 IDENTITY OF THE DENTAL GRADUATE FROM THE FACULTY OF DENTISTRY, DAMASCUS UNIVERSITY, SYRIA.

There is a need to undertake necessary measures to improve the delivered programme and to adopt few characters that formulate the identity of dental graduate in Damascus University and makes him/ her different from those graduated from other Syrian faculties.

Extensive efforts have been exercised to identify the identity of dental graduate in Damascus University. In the new planned curriculum, dental graduate will be:-

1. Excellent in clinical experience (using new technology, infection control procedures, data management, excellent assessment system).
2. Excellent in clinical experience in community and hospital.
3. Having excellent experience in medical emergencies and medical diseases related to Dentistry.
4. Competent in both Arabic and English languages.
5. Independent learner (student- centered approach).
6. Critical thinker who can apply evidence- based dentistry and undertake research.

The revision of any educational programme requires reflection and understanding of what a dental graduate of Damascus University will look like as opposed to one from one of the other eight Syrian dental schools.

5 PLANS FOR ACHIEVEMENT

Several approaches are being under consideration to identify the identity of dental graduate in Damascus University, to improve the quality of dental curriculum delivered, and to consequently formulate a roadmap for accreditation. *Table 1.* Shows action plan adopted, needed resources, required training courses, essential elements in the planned curriculum and procedures for quality assurance. It is hoped that the new approaches would constitute a roadmap for academic staff in the faculty to define essential skills needed to produce a fit-for-purpose graduate in the faculty of Dentistry in Damascus University.

ACKNOWLEDGMENT

Identity of the dental graduate from Damascus university	How to achieve this?			
	Resources	Capacity Building	Curriculum transformation	Quality Assurance
1.Excellent in clinical experience (using new technology, infection control procedures, data management, excellent assessment system).	1. Dental equipments, IT labs, intranet, and digital machines (X-ray). 2. Health informatics and data management system.	1. Run courses about health informatics, to students, staff and employees. 2. Run courses about medical education. 3. Run courses about infection control procedures and its regulations.	1. Data management, information and computer technology should be in the first cycle. 2. Teach modules rather than subjects. 4. Early contact between patients and dental students. 5. Vertical/ horizontal integration. 6. Adopt more reliable assessment methods to assess clinical skills (OSCE).	1. Arrange regulations for infection control procedures and responsible personnel. 2. Adopt and monitor new regulations regarding admission requirements and assessment methods.
2.Excellent in clinical experience in community and hospital.	Provide faculty with mobile clinics.	1.Run courses to dentists in the infirmaries and health centers related to Ministry of Health	1. Encourage students to participate in voluntarily campaigns and productive camps through adopting hospital-community approach.	1. Collaborate for student exchange. 2. Collaborate with the Ministry of health.
3.Having excellent experience in medical emergencies and medical diseases related to Dentistry.	Establish educational training center.	1. Run continuous training programs.	1. Teach emergency in dental practice in the first cycle (theory and practical).	1. Monitor resuscitation training and competence.

Table 1. To be continued

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Identity of the dental graduate from Damascus university	How to achieve this?			
	Resources	Capacity Building	Curriculum transformation	Quality Assurance
4.Competent in both Arabic and English languages.	1.Allocate funding for writing, translating, obtaining copyright and publishing books of high quality. 2. Provide library with recent textbooks and journals and access to E-recourses.	1. Run free courses for students and staff (Professional English)	1.'English in Dentistry' should be integral part of the curriculum. 2.Introduce new materials and methods for teaching and learning 'English in Dentistry' 3. Allocate sufficient time for learning 'English in Dentistry'.	1. Encourage international collaborations that allow student exchange.
5.Independent learner (student-centered approach).	1. Provide E-journals, books databases, IT facilities and Internet.	1. Run free courses for students and staff (IT, English).	1. Introduce new methods of learning and teaching (problem based learning).	2. Create feedback system for assessing learning.
6. Critical thinkers who can apply evidence-based dentistry and undertake research.	1. New books and journals, E-Library and international databases.	1. Run training courses to staff about evidence- based dentistry and research methods and statistical analysis. 2. Run training courses about health informatics, data management and creating databases for future research and evidence-based dentistry.	1. Adopt integration between basic science and clinical dentistry. 2. Teach evidence-based Dentistry in the first cycle (undergraduate). 3. Teach integrated care in the first cycle. 4. Teach research methods and health informatics during the first cycle. 5. A research project should be integral part of the dental curriculum.	1. Strengthen students and staff exchange. 2. Adopt and monitor strategies for scientific research.

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