

Dental Medicine School Timisoara, Romania - looking for the future

Mirela Veronica Bucur¹, Dorin Bratu², Angela Codruta Podariu²

¹ Department of Propaedeutics and Dental Materials, Faculty of Dental Medicine, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

² Faculty of Dental Medicine, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania

Summary

The DentEd Thematic Network Project (TNP) was one of the forty-six thematic networks funded by the EU Directorate on Education and Culture. It established a network of dental educators throughout Europe and beyond. Representatives of Stomatological Institutions, in the former Accession Countries¹ seeking EU membership, have taken an active part in this project in order to promote change for the better in their curricula. All the Accession Countries had DentEd visits in at least one school.

Key words: DentEd, Dental education, Stomatology, Odontology.

Introduction

The aim of dental education, in an extended Europe, may be defined as the preparation of dentists who are able to provide oral health care at high standards, no matter where they were trained or where they wish to practice. The educational philosophy of oral health care taught in different dental schools reflects not only the broader educational and health care practices, but also the socio-economic structure and social norms of the societies in which they are embedded.

In dental education two important trends have been adapted throughout the world with different modifications: odontology and stomatology. In the stomatological approach, dentistry is incorporated into general medical education. In the odontological model, dentistry is taught as an independent subject with little attachment to medicine.

From the odontological/stomatological point of view, in Europe the situation is as follows:

1. In Northern and Western Europe, there is an odontological approach of dental education (Dowling et al., 2003).

2. Countries from Southern Europe such as Portugal, Spain and Italy and one country from the Central Europe (Austria) had stomatological tradition until the time of accession to the European Union (EU). In Austria, odontological training began after 1998 and in Spain the last stomatological school changed its approach in 2001. (Scott, 2003)

3. In the countries that joined EU in May 2004 there is largely a stomatological approach. This is not the case for Malta, where the educational philosophy conforms in many ways to the system that pertains in the UK, and Cyprus where there is no dental

¹ At the time of studying, all the countries from Central and Eastern Europe, involved in the study, had an accession status; therefore the title used throughout is Accession Countries. In the meantime 10 of them became EU member states and the remaining two are considered Candidate Countries.

school and where all the Cypriot dentists are trained abroad.

4. In Romania and Bulgaria, countries that will join EU in 2007, there is also a stomatological approach.

The EU membership brings many benefits in terms of economic, political and cultural development. In order to ensure comparability of education and training in specific professions and to promote convergence towards high standards, a series of Directives were established. These Directives were issued in respect of Medicine, Dentistry, Pharmacy, Veterinary Medicine, Nursing and Midwifery, Architecture and Law. Introduced in 1978, the Dental Directives 78/686, 687, 688/EEC aimed to coordinate undergraduate dental education and the requirements for training as a practitioner of specialized dentistry, to establish the mutual recognition of diplomas, and set up the Advisory Committee on the Training of Dental Practitioners (ACTDP). Directive 78/687/EEC provided a list of subjects for the undergraduate dental curriculum.

Aim

The aim of this study is to present some data of the curriculum adopted in the Dental Medicine School of Timisoara and to compare it with the data from dental schools in the former Accession Countries and with the data presented in a previous study (Shanley et al., 1997).

Method

The information used in the present study was obtained from the following sources:

Undergraduate training in the European Union. Convergence or divergence? - Shanley et al., 1997

In 1995, a working group of the Advisory Committee on the Training of

Dental Practitioners drew up and agreed a self-assessment questionnaire for distribution to all dental schools in the EU. The aims were to encourage the exchange of information and to determine the interpretation of the 1978 Dental Directives in the different countries. It was distributed to 127 schools of twelve EU countries, prior to the expansion of the EU to include Austria, Finland and Sweden. The survey demonstrated significant divergence between schools, in the number of hours devoted to a subject, as well as a considerable variation in what students are taught, learn and practice in the undergraduate curriculum.

Reports of individual school visit in the DentEd/DentEdEvolves Thematic Network Project (TNP)

DentEd TNP was funded by the European Union's Directorate on Education and Culture in 1997. It was established to focus on convergence towards higher standards in dental education in Europe (Shanley, 2001), as it suggested by its title "Achieving Convergence in the Standards of Output of European Dental Education". The project created a network of dental educators from dental schools and related institutions in Europe, which focused on undergraduate dental education. The central part of the project was the self-assessment process that was carried out in many dental schools from Europe. The process of self-assessment was followed by the school visit, which was carried out to a prescribed format.

DentEd Project ran from 1997 to 2000 and was followed by DentEdEvolves TNP, from 2000 to 2003. Finally, fifty dental schools and institutions were visited and the visit reports have provided valuable information on the current situation in European dental and stomatological education (www.dented.org)

DentEd school visit report - Timisoara, Romania

In Romania, only 2 out of 13 dental schools were visited by teams of visitors, during the DentEd and DentEdEvolves TNP. They were the Dental Medicine Faculty "Victor Babes" from Timisoara and the Dental Medicine Faculty "Gr. T. Popa" from Iasi.

On May 2000, the Dental School from Timisoara received the DentEd visit. The school had prepared, in advance of the visit, their own self-assessment. Five voluntary visitors were assigned to the school visit. Visitors commented on each section of the self-assessment and summarized their observations of the school strengths, weaknesses, best practices and innovations. They made recommendations and included all of their comments in the final report of the school. When the school visited had given permission, the report was made public on the web site, www.dented.org.

Review of the Dental Education Structure in Romania

Using the information gathered from the self-assessment document and the comments of the DentEd visiting team, as well as the non-confidential information from the TAIEX², visit in Romania, a draft report about the structure of dental education was issued. After several discussions with the representatives of the school and further modifications, the final report was made public on the web site (Bucur, 2004; www.dented.org)

Results

The present study uses the information provided by 18 dental schools from 10 out of 12 of what were Accession Countries. It represents a quantitative analysis of data collected from the DentEd visiting process in these countries.

The 10 Accession Countries and dental schools involved in the study are presented in Table 1. The names of the cities in which the schools are located are used, rather than those of the universities themselves.

Table 1. Countries and universities analyzed

Country	Dental School
Bulgaria	Sofia
Czech Republic	Prague
	Olomouc
	Brno
Estonia	Tartu
Hungary	Budapest
	Szeged
Latvia	Riga
Lithuania	Vilnius
	Kaunas
Poland	Warsaw
	Cracow
	Lods
Romania	Timisoara
	Iasi
Slovak Republic	Bratislava
	Kosice
Slovenia	Ljubljana

The dental subjects referred to in the 78/687/EEC Dental Directives were used. The data were collected to allow comparisons between the number of hours devoted to dental subjects in the Dental Medicine

² TAIEX is the Technical Assistance and Information Exchange unit of Directorate - General Enlargement of the European Commission (<http://taiex.be/>). In 2002 it planned twelve visits of teams of experts from the European Union to one centre of each of the Accession Countries.

Table 2. Number of hours devoted to dental subjects in the Dental School from Timisoara and the mean number of hours devoted to these subjects in the dental schools from the former Accession Countries and dental schools surveyed in the article Shanley et al., 1997.

Dental Subjects	Dental School Timisoara (Present study)	Dental Schools Accession Countries (1999 - 2002)	Dental Schools Countries EU (Shanley et al. 1997)
Conservative Dentistry	450	450	481
Prosthodontics/Dental occlusion and Jaw function	615	540	502
Periodontics	165	140	194
Orthodontics	240	155	253
Paediatric Dentistry	180	145	126
Preventive Dentistry	75	80	78
Oral Surgery	420	422	288
Oral Medicine/Pathology	45	89	69
Integrated Patient Care	105	55	843
Implantology	75	26	34
Dental Radiology	75	53	69
Total	2790	2401	3007

School, Timisoara and the mean number of hours devoted to dental subjects found in dental schools from the former Accession Countries (Table 1) and in the dental schools from EU (Shanley et al., 1997).

In Table 2, the findings demonstrated some variations in the number of hours devoted to dental subjects between schools.

Although all dental subjects referred to in the EU/78 Dental Directives were included, not all of them were found in every curriculum; some subjects were integrated with other disciplines. For instance, in Table 2, Dental Occlusion and Jaw Function is included with Prosthodontics. Oral Surgery was linked with Anaesthetics in Dentistry and Oral Oncology. Oral Diagnosis was not included in the EU/78 Dental Directives, but it was found in the dental curriculum in a minority of schools visited. Subjects such as Oral Biology and Oral Biochemistry were also found as separate optional subjects in a small number of schools and so data for these subjects were excluded.

Discussion

This study is not without precedent in the quantitative analysis of dental curricula in Europe. Studies were carried out in Europe

with the explicit aim of examination and finding methods of harmonization between different educational systems (Shanley et al., 1997).

Malta and Cyprus were not involved in this study. In Malta, the educational system is similar with the system that pertains in the UK, and in Cyprus there is no dental school.

For the following subjects, there were minor differences in curricular emphasis between the Dental School Timisoara, Accession Countries mean and EU mean: Conservative Dentistry, Periodontics, Paediatric Dentistry and Preventive Dentistry.

The subjects in Timisoara curriculum and Accession Countries dental school curricula with more time devoted than EU dental school curricula were Dental Materials/Technology and Oral Surgery. In Romania and in the former Accession Countries dental schools there is a stomatological approach of dental education. This is characterized by an important time spent in the pre-clinical dental subjects. Also, Oral and Maxillo-facial Surgery is considered to be one of the strengths of the stomatological model.

On the other hand, the EU mean of 843 hours for Integrated Patient Care should be considered in contrast to 105 hours (Timi-

soara) and 55 hours found for the mean in the Accession Countries. It can be concluded that the delivery of care in the odontological approach is more integrated than in the stomatological curriculum. Integrated Patient Care is more difficult to realize in the dental schools with a stomatological approach of dental education due to the discipline-structured approach of the curriculum used in these schools. Moreover, in many schools from the former Accession Countries the clinical departments are housed in different buildings. This is not the case for Timisoara, where the clinical departments are housed in the same building and Integrated Patient Care subject was introduced in the last year.

Besides Integrated Patient Care, other subjects for whom Timisoara curriculum devoted more hours than the Accession Countries curricula and even EU curricula were Dental Materials/Technology, Prosthodontics, Orthodontics, Implantology and Dental Radiology.

Due to these hours, in Timisoara, the students spent in the dental subjects with 400 hours more than the average found in the Accession Countries dental schools, but still with 200 hours less than the average from EU dental schools.

The next phase towards convergence: DentEd III

The information from DentEd and DentEdEvolves provided a European basis for better understanding and collaboration. That information has been used to develop a profile for the European dentist in collaboration with the Association for Dental Education in Europe (ADEE). This profile will be circulated to all European dental schools and all national registration authorities in the EU. Once agreed, this profile, based on a full set of generic and professional competences, will be used to establish a European Credit Transfer System (ECTS)

for dental and stomatological education. This is an integral part of the Bologna process.

The next phase of the project has been approved by the European Directorate for Education and Culture under their Erasmus/Socrates program and will be called DentEd III. This new phase of DentEd will include the 10 new EU countries, and probably an additional 4 countries. It is also envisaged that DentEd will merge with ADEE. The DentEd and DentEdEvolves Projects have played a central role in understanding methods of dental education delivery in the Accession Countries. Future convergence in standards throughout Europe is now a distinct possibility.

Limitations

A limitation of this study was the use of historical control for comparison, represented by the article Shanley et al., 1997. Furthermore, after the concerted actions of DentEd and TAIEX in the schools from the former Accession Countries, numerous changes occurred in every curriculum and some data used in the present study may not be representative today.

Another limitation relates to the possibility of a different outcome if the data from the remaining 23 Accession Countries dental schools not visited were included in the analysis.

Conclusions

The benefits of the DentEd TNP were very important, not only for the schools visited, but also due to the dissemination of information that was distilled through this process.

Due to historical influence, cultural and linguistic differences, as well as variation in regional needs and resources between countries, the imposition of compulsory accreditation is often counterproductive. DentEd

operated on the basis of promoting the concept of international peer review and disseminating the information gained (Shanley, 2001).

Both traditions (odontology and stomatology) have distinct values in their curricula, for instance the medical and surgical experience achieved in the stomatological schools on one hand and the training in comprehensive patient care provided in many odontological schools on the other hand.

Due to the perseverance of some member states from Southern Europe in changing their curricula from Stomatology to Odontology, it should be born in mind that similar change may also occur, at some point in the future, in the new member states. Changing the title of program is less

important than changing the content of the curriculum and concentrating on outcomes and clinical competences. It is hoped that the stomatological schools that hosted DentEd visits (such as Timisoara Dental School), will serve as role models for other schools and encourage significant progress towards higher standards.

Agreement on the profile and competences for the graduating dentist in an expanding EU may be the first step in tuning dentistry into the Bologna process.

Acknowledgements

The authors express their gratitude to all the schools involved in this study that provided a valuable source of information on dental education.

References

1. DentEd/DentEdEvolves Thematic Network Project: www.dented.org/dentedevolves.php3
2. DentEdEvolves Global Congress in Dental Education. *Eur.J.Dent.Educ.*, 2002; 6 (Suppl. 3)
3. Dowling PA, Delap E, Bucur MV, Shanley DB: Towards Higher Standards in Dental and Stomatological Education in Europe. *Journal of the American College of Dentists*, Spring 2003; volume 70, number 1.
4. Scott J: Dental Education in Europe: The Challenges of Variety. *J. Dent. Educ*, 2003; Jan
5. The Dental Directives. Document 78/686, 687,688/EEC: Brussels, European Commission, 1978. www.aic.lv/ace/tools/dir_en/sektoru.htm#Zobarsts

6. Shanley DB, Barna S, Gannon P et al.: Undergraduate training in the European Union. Convergence or Divergence? *Eur. J. Dent. Educ.*, 1997; 1: 35-43.
7. Shanley DB, Editor: *Dental Education in Europe: Towards Convergence. A Thematic Network Project funded by the European Union Directorate for Education and Culture.* Dental Press Kft.Budapest, 2001, Hungary.
8. Technical Assistance and Information Exchange (TAIEX) Unit. <http://taiex.be/>
9. Bologna Declaration Document: www.unige.ch/cre/activities/Bologna%20Forum/Bologna1999/bologna%20declaration.htm
10. University of Deusto, Bilbao (Spain). www.relint.deusto.es/TuningProject/index.htm

Correspondence to: Dr. Angela Codruta Podariu, Professor, Department of Preventive and Community Dentistry, Faculty of Dentistry Timisoara, "Victor Babes" University of Medicine and Pharmacy. Home address: Severin Street, no. 6B, Timisoara, Romania. E-mail: podariu@k.ro