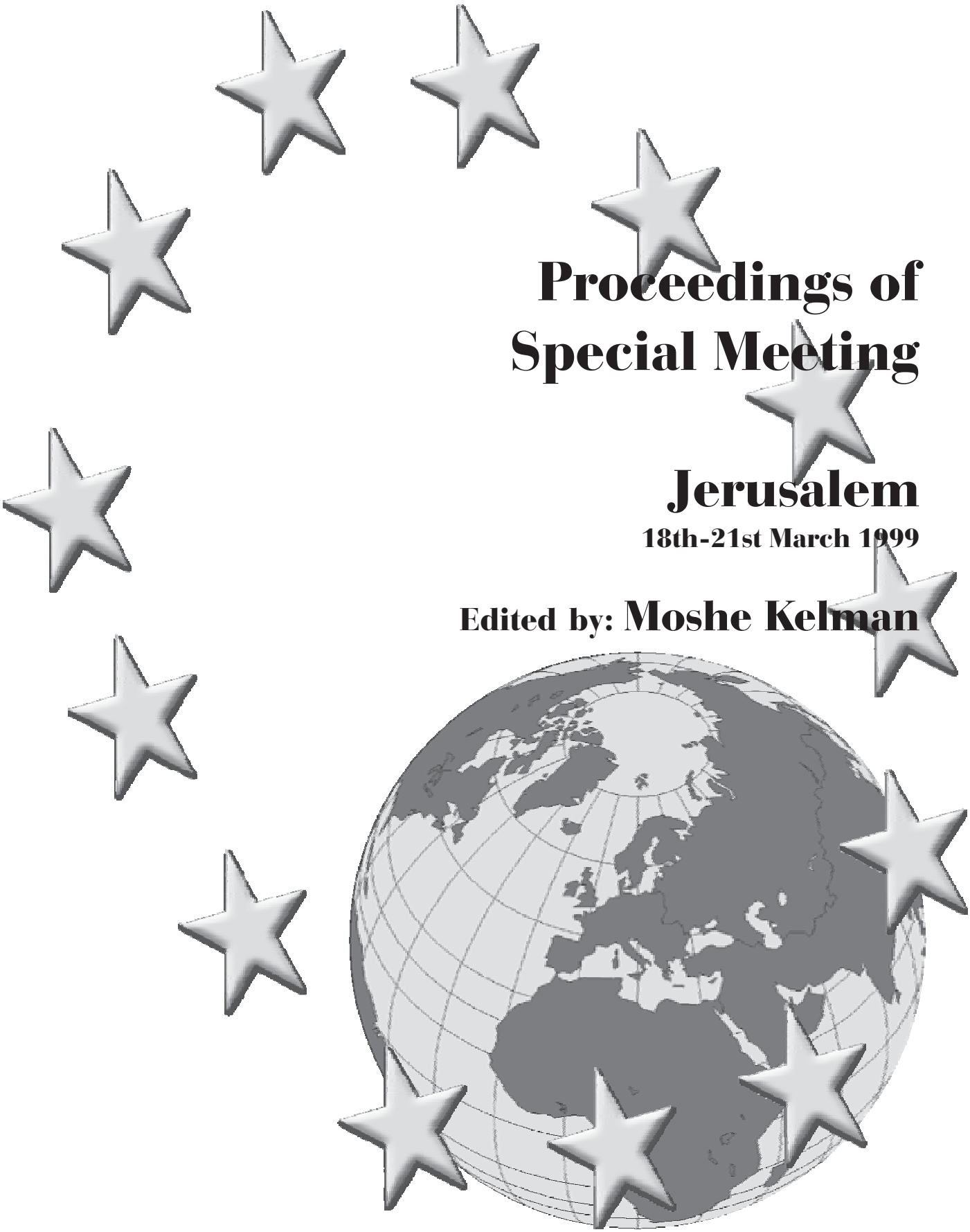
Licensing Examinations in Dentistry

Proceedings of a Special Meeting
Jerusalem, 18-21 March, 1999

Edited by:
Moshe Kelman

Licensing Examinations in Dentistry

Council of European Chief Dental Officers



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Editorial Comments

The purpose of the meeting was to provide a forum for starting a discussion of professional manpower quality as a major component of treatment quality.

By the very nature of the composition of the CECDO, the members come from diverse countries with different mother tongues. Diversity is expected and accepted. It even makes meetings more interesting. Verbal presentations are usually accompanied by slides or overheads and audience participation adds a great deal to the atmosphere.

Editing such presentations into a single document presents many difficulties, most of them quite unforeseen. By its very nature a discussion document should be precise, without too much extraneous subject matter, and with a more or less consistent style and format.

To this end, and with sincere apologies to all concerned, I have endeavored to edit the presentations without, I hope, losing the meaning and intentions of the speakers.

At last the task is finished and the proceedings are hereby presented to you, and hopefully to an even wider audience. An overly long document may tax the patience of the reader and may even serve to discourage serious consideration of the material, but I have made every effort to include all the original content of the presentations.

It is my hope that this document will stimulate discussion both within and beyond the CECDO. The presenters have endeavored to set down some of the issues which will enable CDO's, governmental agencies and EU decision-makers to consider the possibilities of pan-European licensing examinations in dentistry as a means of improving, supplying, and maintaining manpower quality.

Comments and suggestions would be much appreciated both by myself and by the CECDO executive.

Moshe Kelman
Jerusalem, Spring 2000

SUMMARY

A Special Meeting of the CECDO was held in Jerusalem from 18th-21st March 1999, hosted by the Ministry of Health.
The subject was "Licensing Examinations in Dentistry".
16 CDO's including the president, Jos van den Heuvel, and 7 observers attended.

The programme included a presentation on the rationale of licensing examinations, and the views of The EU, UK (GDC), The Netherlands, Finland, Israel and Jordan. Scientific visits and a full social programme completed this very enjoyable meeting

There was a great variation in the views of different countries regarding the merits of supranational licensing examinations for dentists.

Many opposed enabling foreign dentists to compete freely with local dentists.

The competency of different dentists with the same or similar diplomas can differ considerably. While minor differences may be acceptable, considerable differences are undesirable, if we are to achieve and maintain high quality of dental care.

Recognition of diplomas based on political agreements or mutual recognition of different schools may not contribute to a uniform high quality of care.

Society, both at the national and supranational level should define the parameters for training and testing the competence of dentists.

Dental schools should consider this description of competency as the minimal level of education.

Research needs to be done on the added value of a (supra)national licensing examination provided that this level is met by dental school education.

A remaining and very serious problem is the periodic renewal of a license to assure a continuous minimal level of quality of care.

There is no consensus at this time as to how this can be done.

The competency of a dentist is closely related to the competencies of other oral health care personnel. A 'job description' of all oral health care professionals must include aspects of mutual collaboration in favor of the quality of care.

The president will appoint a committee to investigate and make recommendations on the possibility and feasibility of European licensing examinations.

The proceedings of this meeting are hereby presented.

Programme

Thursday March 18th	18.30	Get-together reception –LAROMME HOTEL	
	19.30	Transport to DARNA RESTAURANT Dinner	MINISTER of HEALTH
Friday March 19th	09.00	Opening Remarks	Dr Jos van den Heuvel- President
	09.05	Rationale of Licensing Examinations	Dr A.M. Kelman
	09.30	Licensing Exams in Israel – modus operandi	Dr S.P. Zusman
	09.55	European Union perspective	Adv. Jan Bruseleers
	10.20	Licensing Examinations in Dentistry – the GDC position.	Sir Ian Gainsford
	10.45	Coffee Break	
	11.15	Licensing foreign dentists; the Dutch way	Dr Jos van den Heuvel
	11.40	Dental Clinic Committee –96 Memorandum, Finland	Dr Anne Nordblad
	12.05	The relevance of quantity – the EEA, 1996	Dr Kenneth A Eaton (UK)
	12.20	Social Perspectives For The Dental Profession	Dr Lydia Katrova – Bulgaria
	12.45	Lunch	Laromme Hotel
	14.00	Licensing Examinations – Jordan	Dr Marwan al Habashne – CDO Jordan
	14.15	Palestinian Authority's perspective	Dr Raed Junadi
	14.20	The future of licensing examinations in Europe - Open Discussion	
	16.00	Coffee Break	
	16.30	Summary	Dr Jos van den Heuvel- President
	21.00	Transport to Jaffa. Dinner & entertainment.	

Saturday March 20th	09.30	Walking Tour of Jerusalem – Jewish & Christian quarters, Cardo, Western Wall, Church of the Holy Sepulcher, Bethlehem	Dr Gidon Hermel
		Lunch, YMCA	
	13.00		
	15.00	Panoramic bus tour- Mt Scopus, Nebi Samuel, A-Tur, Bayit Vegan, Haas promenade.	
	19.30	Transport to CHEZ SIMON Dinner	Informal evening
Sunday March 21st	08.00	Check-out of hotel – leave luggage	
	08.30	Transport to DenX	
	09.00	Practical demonstration of Computerized Dental Simulator as a tool for licensing examinations.	DenX Ltd.
	11.00	Transport to Hadassa Dental School	
	11.30	Dental Education in Israel	Prof. Adam Stabholtz – Dean, Jerusalem Prof. Herbert Judes – Dean, Tel Aviv
	12.00	Walter Cohen Middle East Center for Dental Education	Prof Adi Garfunkel
	12.30	Tour of Dental School	
	13.00	Lunch	Hadassah
	14.00	Transport back to hotel –Disperse	

ACCOMPANYING PERSONS PROGRAMME

Friday March 19th	09.30	Leave Hotel – Conducted Tour of David's Tower Museum
	12.30	Lunch in Cardo, Old City
	14.00	Return to Hotel – Disperse
Sunday March 21st	10.00	Transport to Israel Museum, Guided tour and lunch
	13.00	Return to hotel - disperse

The Rationale of Licensing Examinations

Moshe Kelman

The ultimate aim of Dental Public Health is the attainment of the highest possible level of dental health for as many people as possible.

Some of the ways of achieving this end are: -
Ensuring that professional care-givers provide service of the highest quality available;
That there are enough of them to go round;
That the manpower is distributed geographically so that everyone can get to a caregiver;
That care is accessible to rich and poor alike.

Quality
Quantity
Availability
Accessibility

The quality of dental manpower is the issue that is being addressed by this meeting.

Traditionally the medical and dental professions and government were paternalistic. People expected to be told what to do by their "betters"

In the last fifty years and with greater emphasis recently, Autonomy, defined as "The right of the individual to determine his own destiny" has now been accepted (or at least is claimed to be accepted) as basic to all government and professional behavior.

The Hippocratic principles of medical ethics have now been replaced by the "Four Principles" of Beauchamp and Childress, which recognize the autonomy of the individual as an integral part of ethical decision-making.

If autonomy is the watchword then government interference in the decision of the individual is minimized. Freedom of occupation, freedom of movement, the right of the public to choose have become the slogans of modern Europe. Among the consequences are: portability of licenses, freedom to practice a profession without interference by the authorities and passing the responsibility of ensuring quality from the provider to the consumer.

On the other hand the traditional paternalistic approach still exists. Its consequences include: self-government of the profession with the concomitant professional 'closed shop' approach, restriction of the practice of dentistry as much as possible, licensing regulations which are often discriminatory in practice, for example language restrictions, licensure restriction to nationals or those of specific groups of countries.

The ideal approach is dependant on cultural, political and societal values which vary not only from country to country but not less within individual countries where there may be great variations in the needs demands and expectations of different groups. Society should be protected from dental caregivers who do not have the training, ethical qualities and ability to provide quality care.

At the same time there should be no overt or concealed discrimination in the licensing system.

The fact that a person has qualified as a dentist after training in a prestigious school does not necessarily mean that he is a good dentist and certainly does not mean that he is an ethical dentist. The fact that he is licensed to practice in his own country does not mean any more than that.

On the other hand a dentist who has had "second rate" training in a "poor" school may very often turn out to be an excellent dentist in practice. This may be simply because, being aware of the shortcomings in his training, he has made every effort to continue his education and being ethical he does not undertake a procedure unless he feels sure that he has the requisite competence.

The fact that a dentist qualified in 1963 does not mean that he will be clinically competent in 1999 if he has not practiced clinical dentistry continuously and has not updated his knowledge and skills by constant continuous education in whatever framework available.

When, for whatever reasons, dentists from different countries wish to practice their profession elsewhere, it is has been, and still is in some countries, the practice that "reciprocal agreements", EU Directives" or "visitation committees" are the sole criteria for licensing.

It is suggested that although such systems have been in place for some time they do not ensure quality of care to the public.

At the end of the day the person providing care is the care provider and the public has the right to clear guidelines from the authorities regarding the competence of those offering dental care services.

Universal licensing examinations fill this requirement providing that they are objective, unbiased and fair.

There can be no exemptions to such examinations. Locally trained dental graduates must be examined under the same conditions as candidates from abroad. Granting exemptions is the beginning of the "slippery slope". You start off by giving exemption to local graduates or to those who have been in practice for at least twenty years or to graduates of "recognized dental schools" (recognized by who?) or to "specialists" from abroad or to graduates of "Guys" (who are recognized by all Guys Hospital graduates to be the very best!). After a short time the candidate with the help of an enterprising lawyer will have found a way to gain exemption from the exam.

One of the ways to make examinations really objective is to built up a massive bank of questions submitted from as many dental schools as possible and have them vetted by as multinational an examining board as is feasible.

The questions have to be translated into as many languages as possible so that the candidate is examined in his mother tongue or at least in the language in which he was trained.

Ambiguous questions, questions demanding subscription to a particular school of thought or employing brand names of materials, equipment or medicaments should be purged from the question bank.

The often heard argument 'if he wants to practice in our country he has to do it our way" may appear to be reasonable but in fact is xenophobic and ethically indefensible.

The examination questions should be multiple choice, closed, with only one correct answer and the answer sheets capable of optically scanning for the preservation of objectivity and anonymity.

Copying in examinations has been the bane of professors and the aim of students for generations. It is true to say that the latter are invariably one step ahead of the former!

It is now possible to generate the same exam for a large number of candidates where both the question numbers and the answer choices are changed. For example; question 27 with a correct answer of (c. on one candidate's paper, appears as question 93 with a correct answer of (a. on another candidate's paper. As far as I know there is no way to cheat in such an exam. So far!

There should be no way in which the candidate's answer sheet can be identified with his country of origin, ethnic identification, sex or age. The examination of practical skills is very much more problematic and the future of this part of the licensing examination is surely in the area of high tech and computer simulation.

The same multinational board of examiners suggested above should determine the syllabus for the examination. The syllabus should be based on the knowledge and judgement deemed to be required for the delivery of high quality dental care, as opposed to the minutiae of scientific detail which, while important in an undergraduate curriculum may not be as relevant for the delivery of high quality dental care. This syllabus should be published and updated continuously. However any such updates should not come into force immediately, thus prejudicing the chances of candidates who have prepared themselves on the basis of the published syllabus.

The pass mark of the exam should be determined in advance and there should be no predetermined pass rate. Of course in a given exam if all the candidates should fail the examiners would be well advised to have another look at the questions or perhaps at the computer! The same exercise would not necessarily be justified if everyone passed.

The results of the exams should be published indicating the subjects in which most candidates were successful and those subjects in which candidates did not do well. In addition the performance for different countries of origin, different schools and candidates of mature age as compared to recent graduates would help to provide feedback to the various dental schools which might be reflected in the curriculum of those schools in the future.

One of the difficulties in setting the exams is the fact that most of the examiners will by the nature of things be university teachers who are used to teaching and examining undergraduate dental students. This results in questions which test short-term memory and factual knowledge, rather than clinical experience and judgement which, as mentioned above, are possibly more important in a licensing, as opposed to an academic examination. For this reason graduate and continuing education teachers as well as highly experienced clinicians should be well represented on the examining board.

The following important issues (among others) should be discussed, possibly at local levels, since needs of different countries will undoubtedly vary: -

- Examining candidates who have been in restricted practice of a particular specialty;

- The number of times a candidate may present himself for examination after failing the exam;

- The minimum period between failing and re-sitting the exam;

- Whether the multiple choice examination should be a separate entity from the practical examination, or whether they should be considered as one examination resulting in the candidate having to re-sit the first part that he passed in the event that he failed the second part.

- Appeals procedure.

Shlomo P.Zusman

The main problems we had to address in operating these examinations were:

1. The large number of candidates.
2. Great variability in dental education of candidates from different countries.
3. Israel is a country that encourages immigration.

The first requisite is technology: most of the process is now computerized, although we have to use more then one software application. The candidate database is run in an application built on a MAGIC Application Generator tool which is capable of generating letters, lists and tables. It has been upgraded three times in the last ten years. Fortunately I do the maintenance and we are not dependent on outside computer professionals.

The composition of the National Board of Dental Examiners (NDBE) helps to address the problems of differences in dental education but only to a limited extent. There are seven members on the board: two from each dental school, two from the scientific council of the Israel Dental Association (IDA) and one, the chairman, from the Ministry of Health (MoH). The representatives of the scientific council are themselves teachers at the dental schools, and the MoH member is an Israeli graduate, so it is clear that the material taught in Israel is the backbone of the exam.

The exams consist of 2 parts: Part I theoretical, Part II clinical.

Part I consists of 180 multiple choice questions, each has 4 or 5 possible answers. The question bank is managed by a custom-made software application. Questions are received mainly from the dental schools. The program selects 180 questions according to a preset proportion for each main discipline. For example 30% of the questions are prosthetics & restorative dentistry. The NDBE goes over the questions and the final selection is approved.

The examination is then sent out for translation into Russian, Rumanian, French, English, Arabic, and Spanish. Translation is a major headache but is essential if the examination is to be fair to all candidates. The translator has to be a dentist fluent both in Hebrew and the language required and has to be up to date with professional terminology. It is very difficult to find such a person. If the translator studied abroad recently, and his mother tongue is foreign, he probably doesn't know Hebrew well enough. If he has been in Israel for some time he has probably forgotten the professional terminology!

During translation, mistakes in the questions emerge and we have to make sure that all the translators are informed. Sometimes they have already completed the work and the text has been typed and we have to go back and start again. This is particularly difficult for some languages where typists are very difficult to find. We are still looking for a good typist in Rumanian! It has been known for mistakes to be

discovered after 400 copies of the exam have already been printed up in seven languages!

We have problems with dialects. Some people have said 'This is Chilean Spanish, I am from Argentina'. The official version is the Hebrew text. The translation is meant to help the candidate. He gets both copies of the exam and we don't guarantee that the translation is perfect. We have to give more time to these people, because they have to consult two texts. The exam time is 3 hours, ½ hour is allowed for those who have a translation, and a further ½ hour for those who don't (like a Brazilian candidate who has to make do with a translation in Spanish or English since we don't provide Portuguese).

We hire large halls for the exam as we have three to four hundred candidates each time. We check their identity at the entrance and give each a sealed envelope bearing his name. After everyone is seated they are allowed to open their envelopes. We try not to answer questions, although it is not easy. We try to make sure there are dentist invigilators present fluent in as many of the mother tongues of the candidates as possible.

The answers are entered into a computer readable answer sheet for optical scanning which is carried out at the Department of Medical Education in the Hebrew University Medical Faculty.

The data is analyzed such that for each question a difficulty mark, which shows the proportion of candidates who answered correctly, is computed.
A mark of 1 means 100% answered correctly, 0 means no one answered correctly.

A diagnostic rating is also given for each question indicating whether the best candidates got it right or not. 1 means that only the best candidates got the correct answer. A rating of less than 0.15 means that the question was answered correctly mainly by weak candidates and is therefore suspect.

The board sits with the statisticians and goes over 3 types of questions: those with low gradings for difficulty and consistency and those in which a wrong answer attracted many more replies then the correct one. Some questions are discarded, or the correct answer changed, or more then one answer can be accepted. Often the board decides to leave the question as is, if it finds it to be fair and correct.

The data is then re-analyzed. The Board has another look at the results, to see if there are still problematic questions. If so, we repeat the process. Sometimes a third analysis is done. 60% is the pass mark.

The results are entered into the "Magic" application which generates a "pass" or "fail" relevant letter. The examiners are not aware of the name of the candidate at any stage.

Part II is clinical and more problematic. Anonymity cannot be preserved absolutely, and there may be a level of bias.

There are two components: non-manual and manual.

The non-manual component is diagnosis, treatment plan and x-ray analysis. Each person receives a page with 5 x-rays and 5 clinical photographs. For each photograph, a short description of the patient is given, and there are several open questions: Describe the lesion, give a differential diagnosis, indicate what tests you would perform, what is your diagnosis, what would you advise the patient. The candidate has to write short answers. The chief examiners decide which answers are acceptable and the marks to be awarded for each. Translators are necessary although the examiners can read the most common languages.

Often during the process, the "master-copy" is reviewed, and additional answers are accepted as correct. Papers with failing marks are checked independently by a different examiner. This component provides 40 to 50% of Part II mark (the weight is changed by the board).

It is impossible to preserve absolute anonymity in this part. The examiner doesn't know the person's name but if he writes in Russian, we know he didn't study in Israel!

For the manual part, we hire the dental school clinic or its phantom lab. We can examine about 50 candidates in a session. They have to prepare plastic teeth for crowns, cavities for restorations, or open a tooth for root treatment. We don't assess the process, only the result. As we have more than two hundred candidates, it takes 3 days in 6 shifts.

At the end of the exam, all the preparations are taken to a different room for assessment. Each task is assessed and marked by two independent examiners according to a predetermined protocol. The form is printed on both sides. The first examiner completes the form, turns the page over, and then the second examiner does the same. Then a third person, the coordinator for that task, looks at the marks awarded. If they are close, he takes an average. If they are far from each other, he assesses the task for the third time, and takes an average with the one closest to his mark.

Finally, all the results are fed into the computer which calculates the final mark which comprises the remaining 50-60% of Part II .

Two important issues have to be mentioned here:

1. Past record of the candidate: The Israeli graduates have a "course grade" from their schools. Candidates from abroad may participate in preparatory courses *in Israel only*, which, if finished successfully, provide them with a "course grade". This "course grade" is used to help the borderline candidate who has at least 50% in the exam. 10% of his "course grade", rounded off, is added to the mark: i.e. 53 in the exam, 60 course grade, 53+6=59, failed. This helps those who were close to the passing mark. A course grade of less then 60 is not taken into account.

2. The appeal process. The candidates have a right to appeal. The appeal committee consist of the deans of the dental schools (or their representatives) and a lawyer from the MoH.

In Part I of the exam, the committee checks the exam and may cancel any question they deem to be ambiguous or unfair. One or two questions are usually cancelled. All the answer sheets of those who failed the exam are re-analyzed. This means that very often someone who did not appeal is told to his surprise that he has passed.

Sometimes a question is cancelled only in a specific language because of unsatisfactory translation and then only candidates who presented in that language have their answer sheets re-assessed.

In Part II the appeal process is more problematic. The appeals committee checks the answers and marking of the non-manual component for every candidate who failed but had 50% or more.

The dental members of the committee may agree or disagree with the examiners. For example; if the candidate missed a diagnosis of cancer or of caries, the committee usually rejects the appeal, even if the candidate has a borderline grade. On the other hand the committee is inclined to be more flexible if the candidate errs with a rare condition such as Hand, foot and mouth disease.

The appeal with regard to the manual component is conducted by the examiners checking the actual teeth that the candidate prepared. Of course it is not possible to check things like occlusion or nicking an adjacent tooth while preparing an interproximal cavity. The basic requirements can however be re-examined.

In general a number of appeals are upheld both for Part I and Part II of the examination.

Conclusion

The modus operandi has been developed by experience over a seven year period. No doubt there is room for improvement, but presently we have a smooth working method which enables us to examine hundreds of candidates in a short time with a high level of reliability.

Jan Brusseleers

Introduction

One of the European Union's most valuable achievements is bringing new freedoms and opportunities to ordinary people - as employees, as consumers and as family members.

The rights and benefits are based on the four freedoms guaranteed by the European Community Treaty: the free movement of people, goods, services and capital. Progress in making these freedoms a reality was slow until 1985 when the EU launched its ambitious Single Market Programme to dismantle the myriad of frontier controls and non-tariff barriers which had long prevented Member States operating as a genuine area of free movement.

Border controls on goods have been completely eliminated. The European Commission constantly scrutinises new national rules, regulations and practices to make sure that new restrictions on free movement are not imposed. Proper enforcement of Single Market rules to ensure that the full benefits are delivered is a top priority of the Commission.

Legal framework

As far as the free market for professionals is concerned it is primarily the free movement of persons and services that is of importance. Free movement is ensured by the law on establishment (articles 52-59 EEC) and the right to free (private) services (articles 59-66 EEC). These rights relate in the first place to the prevention of discrimination on the grounds of nationality. In addition particular provisions can also create restrictions for foreigners that are more stringent than those on the local population. In this respect for example we are concerned with the establishment and residence requirements of professional competence and particular prescribed diplomas or titles. Article 57 EEC provides for mutual recognition of diplomas certificates and other titles (para 1) in the directives of the Council, and for the co-ordination of requirements for access to, and the implementation of these activities (para 2).

Many EU countries require diplomas, titles, certificates or other special qualifications as a condition of access to certain salaried and self-employed occupations (the 'regulated professions'). It can sometimes be difficult to have individual training and skills fully recognised. This is because of significant differences between training courses and diplomas in each country.

For a number of professions in the area of health care the free movement of persons is regulated by means of specific directives; this is also the case for dental practitioners with the two Directives 78/686 and 78/687 of 25/07/78.

These directives came about as a result of a long and sometimes bitter struggle that had started (for medical doctors) in the early 60's.

The problems of community agreement in achieving such directives were enormous.

The Community comprises very different countries, with years of independent cultural, social and political development behind them, and this reflects also on the organisation of their health systems. When you take also into account that these Directives had to be adopted unanimously at that time then you can imagine that, to speak in medical terms, it was a hard and complicated delivery.

The EU therefore decided in 1984 to adopt general directives only on professional recognition of diplomas awarded for at least 3 years of university studies at that stage.

Let us have a look at the specific directives, particularly for dental practitioners.

Specific Directives: E.U. dental practitioner

General Principles

An EU-citizen has the right of establishment as a self-employed or employed person in any Member State of the European Union, subject to recognition of his qualification. (There are simplified authorisation and registration procedures if he wishes merely to provide services in another Member State.)
Recognised diplomas are those issued by a Member State, mentioned explicitly in the Directives and delivered to an EU-citizen. The diplomas have to satisfy the entire minimum training requirements of the Directives.

Exceptions and interpretations.

Those principles have undergone some evolution over time.

For example the term “citizen of an EU-Member State” has been expanded by the Agreement on the European Economic Area signed in Porto.

Citizens of Norway, Iceland and Liechtenstein and citizens from countries of Central and Eastern Europe, with whom the European Union and her Member States have signed Association Agreements, as well as their diplomas, now come within the scope of these Directives.

These Agreements expressly forbid discrimination on the basis of nationality for the right to professional practice. This is the case at the moment, for citizens from Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Latvia, Lithuania, Estonia and Slovenia. However, the diplomas of these countries are not yet recognised.

The European Court of Justice in Luxembourg has ruled in the case of a citizen from a third country, whose wife or first degree relative is a citizen of an EU-country, and falls in the category of the Regulation on Free movement of employed persons, that he is considered to be an EU-citizen for the right to professional practice.

For example, a Canadian Dentist, qualified in the UK and married to a UK citizen working in Belgium, can get recognition of his British qualifications and the right to practice his profession.

Finally, a diploma not mentioned in the Directives, can also be recognised when a certificate can be produced from the competent authorities of the Member State that issued the said diploma.

Specialist diplomas

For specialist qualifications in orthodontics or oral surgery, recognition is mandatory and automatic only for the Member States specified in the Directive.

For others , not covered by the Directive or covered only in respect of the host Member State, recognition is mandatory and given on a case-by-case basis. However the host Member State is required to compare the education and training of the applicant with that required in the host Member State. Applicants may in some cases be asked to undergo additional training.

Protection of acquired rights

The new situation created by the Directives does not affect those who qualified before the implementation of the Directives. The standard articles on acquired rights covered this principle.

Diplomas that do not satisfy the minimum training requirements, and where training began before implementation are also recognized if the holder has worked in an EU-Member State as a qualified practitioner for at least 3 of the last 5 years.

Note:
In some countries training started before implementation, could have fulfilled all training requirements. Accordingly, EU-Member States agreed to exchange lists with the dates when specific qualifications satisfy all minimum-training requirements, so as to facilitate the procedures for recognition of diplomas,.

Measures facilitating free movement and the right of establishment.

Scope of practice

A migrating practitioner may carry out only those procedures that are permitted to the local dental practitioners. His activities are completely governed by the national legislation of the Host Member State. He could be forbidden to carry out procedures that were permitted in his own country, or be allowed to do something that was forbidden in his own country and which he is not trained to do. (Of course this would be ethically unacceptable- editor.).

Use of titles

Practitioners, have the right to use their academic title, and its abbreviation, followed by the name of the training institution that awarded the qualification.

If a professional title, protected by law, exists in the Host Member State he is also allowed to use that title.

Information Services

The Host Member State must make information regarding professional legislation available and, eventually, language training for the region where the practitioner wants to work.

Rules for setting up in practice.

Good standing: - Evidence of this must be produced if required.

Physical requirements.

Professional Oath

Duration of the procedures. - The authorities of the host Member State have three months in which to process an application.

Providing services.
An EU-dentist has the right to work as a self-employed person in any EU country, either permanently or temporarily. He can choose to offer his services in another country without establishing himself there permanently.

Coordination of training requirements

The recognition of diplomas on the European level comes along with a fixed minimum level of training requirements and depends of the degree of their harmonisation.

Evaluation

Practical problems

- Which are the competent authorities?
- The final diploma is often delivered 2 years after graduation: -There is a gentleman's agreement to accept the provisional diploma certificates provided that there is an additional certificate from the competent authorities certifying that the person concerned really got the diploma and that all training requirements of the Directives have been fulfilled.
- Name of diploma has changed: newly named diploma will be accepted if there is an additional certificate of the competent authorities.
- Dates of conformity: a list has been drawn up with these dates to facilitate and simplify the procedure of verification.

Wrong application of the Directives (by the Member States)

Differences between the Member States

Due to the wide variation in health care and education systems among the eighteen Member States of the European Union and European Economic Area, real harmonisation seems, at least for the moment, to be impossible. These differences are the result of long-standing traditions deeply rooted in national culture and the preferences of the various Member States.

To give some examples (on training):

- continuing education is compulsory in some countries, not in others.
- rigorous selection of students for admission to studies in some countries, while in others there is unrestricted admission:
- increased migration of students to less demanding countries:
- resulting frustration of the stricter countries. (this is a national decision and outside the competence of the EU)

Not regulated by the Directives

- No co-ordination of different practice conditions: (see above, this is a national matter.)

Results of the A.C.T.D.P.

- Meeting point of the different agencies concerned: profession, training institutes and the Government.
- in general many reports and recommendations but with poor results in changing or creating binding rules (i.e. Directives);
- better understanding of each others' educational system
- Financial and organisational problems since the last enlargement of the European Union. These problems will become even bigger with new further enlargements with the Central and Eastern Europe countries.

Jurisprudence

- broadening of the definition of European citizen
- access to public hospitals: no discrimination allowed any more between nationals and other EU-citizens for jobs where there is no participation by public authorities.

General System

The first general directive (Directive 89/48/EEC of 21 December 1988), dealing with diplomas covering at least 3 years study at university (or equivalent) level, came into force on January 1, 1991 and the second general directive (Directive 92/51/EEC of 18 June 1992), completing the first one and covering all other diplomas, took effect on June 18, 1994.

The basic principle of this system is that, if one is qualified to exercise a profession in his home country, he should be qualified to exercise the same profession in any other EU country.

If the profession is not regulated in the country in which a professional wishes work, no recognition of qualifications is necessary. He is entitled to go and work in that country without any formalities linked to training or qualifications. These directives are, of course, very important for other professions in the dental care sector: dental hygienist, dental nurse, denturist, dental technician.

Content of the Directives

General Principles

In principle, an EU qualification is automatically recognised.

However, if the training undergone is significantly different in terms of either length or content to that required in the host Member State, an additional requirement may be imposed.

The candidate may choose either an adaptation period or an aptitude test.

If the applicant qualified outside the EU but has practised legally in a EU state for a period of 2-3 years, he may be permitted to practice in the host EU state.

Applications must be dealt with within four months. The applicant has the right of appeal before a court or tribunal.

Major difficulties exist with the definition of the term "regulated profession" in different Member States. Not only are the regulated professions not always the same in the different countries, but also the scope of activities covered may be such as to give the impression that two different professions are under discussion.

There is no legal obstacle to practise one's profession in a Member State where that profession is not regulated by law.

Professional recognition is not the same as an academic recognition. Where a candidate wishes to pursue higher studies he may find that his qualifications are not recognized by the university.

The influence of the Directives on the individual has been, until today, very small in the different Member States, as the European citizen is, in general, not willing to move.

The majority of the migrants seems to come from neighbouring countries (for Belgium, they come mostly from France, Germany and The Netherlands). However many Swedish dentists migrate, especially to the UK.

Conclusions

The future will present major challenges as new member states join the EU.

The legal procedures for changing directives have to be simplified.

Advisory Committees must become more efficient.

The EU-regulations will increasingly influence member states by introducing the directives into national legislation and create work and study facilities for foreigners.

Increased awareness of each other's education and health care systems will strengthen mutual confidence.

Free movement of professional practitioners, students, teachers, researchers and even civil servants, will accentuate this influence.

In the framework of the specific directives, based on mutual confidence in the value of differing training and qualifications systems, it is, in my opinion, not realistic to consider a universal licensing examination.

With 15 different States (and in the future 21?) the possibility of agreement by the concerned parties over the content and conduct of such a universal licensing examination, is remote.

It is preferable to achieve harmonised systems of training and examinations by increasing the practice of visiting committees and external examiners, and with more exchange of students and visiting professors.

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Licensing Examinations in Dentistry - the GDC position.

Ian Gainsford

The General Dental Council, or GDC, is the regulatory body of the Dental Profession in the UK. Its authority is established currently by Parliament in the Dentists Act 1984.

This Dentists Act states, "It shall be the general concern of the Council to promote high standards of dental education at all its stages and high standards of professional conduct among dentists..."

It is this requirement that gives the GDC powers to approve: -

Educational programmes leading to an accredited or recognised qualification in the UK.
Approval of the Examining procedures.
Recognition of overseas training and qualifications.
Disciplinary and Health issues.
Distinctive or Specialist Titles

The GDC is required by the Act to keep a Register of those dental practitioners entitled to undertake the practise of Dentistry in the United Kingdom, and gaining admission to the UK Dentist's Register is achieved by a number of avenues some of which are to be changed after 2001.

At present entry is achieved in one of the following ways: -

1. As graduates of an approved UK University Dental School. The GDC makes no further requirements either in relation to citizenship, Home Office regulations regarding work permits, or satisfying State Board type Examinations. The Dean of the relevant Dental School sends in lists of those students who have qualified, together with an attestation of them having a good character and good mental and physical health to demonstrate fitness to practice. All that is required from the graduate is a registration fee.

2. In addition to the Universities in the United Kingdom, the Surgical Royal Colleges have the power to hold examinations for the licence diploma to practice even though they do not provide courses leading to those examinations. However, they will only accept students for their examinations with the approval of the Dean of a recognised UK teaching institution certifying that an approved course has been satisfactorily followed and completed.

3. Other graduates who have direct entry to the UK Dentists Register are graduates of approved Universities in the British Commonwealth or former Colonies, which have entered into an agreement with the GDC to have their courses and examinations validated by the GDC via nominated Visitors, who would attest to the sufficiency of their courses and examinations. This covers graduates from such countries as Australia, New Zealand, South Africa, Hong Kong and Malaysia. At the moment, all

that the graduates of such recognised overseas institutions have to do to gain registration in the UK Dentist's Register is to comply with certain GDC regulations concerning such issues as good health and conduct, proof of graduation, payment of registration fee etc. However, this avenue of entry is expected to cease after 2001 and the graduates of these schools will be considered alongside graduates of other non EEA countries and be required to take a completely new examination, the International Qualifying Examination (IQE).

4. The next group having direct entry to the UK register are those who come under the Dental Directives of the European Economic Community. Under the current EEC regulations, graduates in dentistry of an EEA member state who have obtained their training and qualification there, and are also nationals of a member state, have the automatic right to have their name entered in the UK Dentist's Register. This applies to Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Liechtenstein, Luxembourg, the Netherlands, Norway, Portugal, and Republic of Ireland, Spain and Sweden.

An interesting problem has arisen in relation to Ireland, which is an EEC country but previously had automatic rights of recognition by the GDC by virtue of GDC Visitations of their courses and examinations. They were asked whether they wished to come into the arrangement with the GDC as members of the EEC or under the old arrangements within the British Isles- clearly the latter was unacceptable so since 1994 they have been covered solely by the European regulations. This has created a problem for them as they had accepted a number of students from Africa paying significant fees who have now qualified with an Eire degree but cannot practise in the UK or elsewhere in Europe because they are not EEA nationals. Previously, of course, they could have practised in the UK by virtue of holding a GDC recognised Irish degree.

5. Another method of gaining entry to the UK list is via the Statutory Examination organised on behalf of the GDC. This procedure was established after the second world war when there were a number of dental refugees in the UK who had escaped from Nazi Germany but had not been able to practice in the UK because their training had not been recognised. When a new Dentists Act was going through Parliament, a clause was added to provide a means of testing the knowledge and skills already possessed by a dentist holding a qualification not admitting him/her to the United Kingdom register. This examination, which consists of two parts involving written papers, practicals, clinicals and vivas, is designed to test claimed equivalence. That is, equivalence of the holders qualification with that expected from an UK graduate at the time of qualifying.

Since this examination is to test claimed equivalence, taught courses for this examination have been considered inappropriate. The test is of training they have had in their home country, not of training they have received in the UK.

In order to be eligible to sit this examination the overseas dental candidate must hold a degree or diploma granted by a University or other approved body after a course of study which the Council considers appropriate. This is usually a full time course of not less than 4 years in a University listed in the International Universities Handbook.

On passing both parts of this examination the applicant has direct entry to the UK Dentists Register.

It is proposed that from 2001 the Statutory Exam will be replaced by a completely new examination - The International Qualifying Examination (IQE) which will be used for all non- EEA dentists who wish to practise in the UK

The purpose of this examination will be to establish the level of competence of the applicant, which shall be not less than the standard required to qualify for a degree or licence in dentistry in the UK.

Hitherto it has been the object of the Statutory Examination to establish equivalence of the applicant with what would have been expected at the graduating examination at a UK Dental School and consequently training in the UK at a Dental School for the examination was discouraged. Now, as it is actual competence that is being tested, there will be no objection to Dental Schools in the UK providing training programmes for the IQE Examination.

This examination will also be obligatory for overseas dental graduates currently admitted by right, as in Hong Kong, Australia, S.Africa etc. but it is proposed that it will not be applied retrospectively, so that applicants graduating from recognised dental schools before 2001 but applying for entry to the UK Register after 2001 will still be able to register without examination.

Essentially therefore it is proposed that from 2001 only those students graduating from an UK or EEA Dental School who also have EEA nationality will be able to have direct entry on the Register.

A number of issues arising from the EEC Dental Directives have to be grappled with and some of these are:

The issue of "Derived Rights" - this relates to EEA graduates who though themselves are non EEA nationals are eligible to register in the UK by virtue of being married to someone who is and that spouse is in employment in the UK.

This is perhaps an example of 'vicarious registration' - the GDC will of course have the responsibility of ensuring that the marriage is still in existence at the time of Annual renewal of the Registration and the spouse is still in employment in the UK.

If it is a UK National who is the spouse giving 'derived rights' then the requirement of that person being in employment is not necessary but still being married to the UK national is.

Another problem is the category of Third Country Diplomas- This is where a degree or diploma is recognised by a member state of the European Community and the individual has the right to practice in that country e.g. a graduate from Brazil or Goa practising in Portugal. If subsequently nationality is established in the host country, the question arises can the applicant practise anywhere in Europe? With the current enthusiasm in the European Community to ensure complete freedom of movement it is a legal requirement of the European Regulations that each member country take

into account the recognition of that dental qualification and the expertise subsequently acquired in the host country by the dentist. That is to say, that for the UK, the GDC will have to consider each case on an ad hominem basis. A procedure for this is currently being established at the GDC for this particular eventuality.

6. Another avenue to getting on the Dentists' Register for the overseas graduate is via Temporary registration. The restriction here, however, is that a dentist who has Temporary Registration may only work in a NHS Hospital or in a Dental School under the supervision of a Consultant for training. The issue for the GDC, in this situation, is the recognition of the primary overseas dental qualification.

Once approved, and provided the applicant has a post in a recognised hospital or dental school, the applicant can have an automatic temporary registration for a period or periods summating to 4 years. It is of course recognised that training can extend over a longer period than 4 years and extensions are allowed up to 7 years.

Temporary registration does not of itself lead to full registration as at the completion of the approved training the temporarily registered dentist comes off the register.

The other lists that the GDC is responsible for in relation to dental practitioners are the Specialist Lists and Titles.

The entry of the United Kingdom into the European Community and the acceptance of the Chief Dental Officer's Report on UK Specialist Dental Training in 1995 has allowed the GDC to progress its introduction of Specialist Titles and Lists. In November 1997, it approved the Regulations establishing these Distinctive Titles and setting up a Register of those entitled to recognition.

These GDC regulations only became approved when the European Primary and Specialist Qualifications Regulations 1998 were themselves approved by Parliament.

The Statutory Instrument setting out the European Primary and Specialist Dental Qualifications Regulations was laid before Parliament at the end of March 1998. Although they in fact only apply to Orthodontics and Oral Surgery which are the Dental specialties currently covered by the EEC Directives, the GDC has formulated its own regulations for all the specialties on the proposed EEC regulations in order to avoid conflict in the future. Clearly the GDC must be consistent and ensure comparability in all specialties as it would be unsound legally to proceed with its regulations if they were in conflict with those laid before Parliament.

The Lists were opened on specific dates for Oral Surgery, Restorative Dentistry, Dental Public Health, Surgical dentistry, Endodontics, Periodontics Prosthodontics, Paediatric Dentistry and Orthodontics. The specific dates are important because the Transitional Period of two years starts from each of those dates for related specialties.

Registered Dentists, that is those dental practitioners whose names appear in the UK Dentists Register will have a right to direct entry on a specialist list by virtue of their education and training if:

1. They are dentists awarded the Certificate of Completion of Specialist Training, the CCST, by the GDC.

2. They are an EEA national, i.e. someone who is a national and qualified in one of the countries in the European Economic Area and who holds qualifications which meet the Directives of the EEC in relation to the recognised specialties which at the present moment relate only to Orthodontics and Oral Surgery. (The EEA is the EEC plus specific countries, which were in the old Free Trade Area, Norway, Iceland and Liechtenstein)

3. Have a knowledge of and experience in the speciality derived from academic or research work which satisfies the Council as being equivalent to the knowledge and experience which would be acquired during the training required for the award of a CCST in the Speciality.

The European regulations in relation to Oral Surgery and Orthodontics and the GDC regulations in respect of all the other designated specialties, recognise that there are existing specialists, who by virtue of their education and training, will be entitled to be automatically registered on a Specialist List without holding a CCST and these are being processed at present.

There are three groups in this regard. The Transitional arrangements will apply for a 2 year period from the commencement of the date for which any given Speciality List is established.

1. The first group are registered dentists who are or have been a NHS or Honorary Consultant in the NHS. A formal letter from the Chief Executive of the relevant NHS Trust would specify the appointment or honorary appointment.

2. The second group are registered dentists who have not been consultants but who have been accredited before the establishment of the relevant specialist list, under an arrangement where certain Royal Colleges and Dental Faculties acknowledged the satisfactory completion of a period of specialist training in dentistry by granting an application for accreditation made by the person who had completed the training.

3.The third group are registered dentists, who also have not been consultants, but began training in the appropriate speciality before the commencement of the transitional period for that speciality and completed the training after the old style of accreditation had ceased. These will be granted automatic recognition and will be processed directly by the GDC.

All others seeking registration on a specialist list will require " mediated entry " that is assessment by the appropriate Assessment Panel of the Relevant Specialist Advisory Committee. Following this assessment a recommendation will be passed to the GDC for endorsement. This will apply both in relation to those applying under the Transitional arrangements and for those applying in the future who do not fit into the automatic recognition regulations.

In the regulations laid before Parliament is a clause stating that a person is also eligible for recognition as a specialist if he has specialist dental qualifications

awarded outside the United Kingdom or has a knowledge of, and experience derived from, academic or research work. Although this legislation applies to orthodontics and oral surgery, which are the specialties covered by the statutory instrument, the GDC has accepted this principle in relation to all the other specialties.

Clearly in applying ad hominem recognition to those who do not satisfy the formal arrangements, notice will have to be taken of evidence presented by the applicant of their appropriate qualifications, clinical experience, supervised training, relevant research and publications, teaching experience, continuing professional education and professional standing. Although any one or some of these could satisfy entry on a list, membership of a specialist society alone would carry no weight.

In order to make this work it is essential to apply a level of flexibility in its interpretation, recognising that the application of properly audited continuing professional and postgraduate education should be an essential component for retaining ones name on a specialist list

A too rigorous interpretation of the guidelines or as some have suggested criteria for mediated entry, could result in others outside the profession being the arbiters in this matter. Here I mean the High Court undertaking a judicial review. I consider the preferable option to be the safety net of retention of a name on a specialist list being determined by the evaluation and audit of continuing postgraduate education.

Clearly there will be a considerable amount of disquiet amongst colleagues about how guidelines will be applied and whether there will be equity and consistency, not only within the various specialties but also across them.

The GDC will certainly expect to see intelligent and consistent application of these guidelines and whilst it may be possible over a period of time to establish case law, this will only emerge slowly beginning with the two year transitional period.

Licensing foreign dentists; the Dutch way

Jos van den Heuvel

Introduction

Licensing for the practice of dentistry has various dimensions. Providing dental treatment, is in principle, permitted to anyone who is able to do so. Legislation is directed to the very crucial points of assurance of quality of care.

Dentists

Only people who are registered on the legal dentists register are allowed to call themselves “tandarts”. Those who are registered, are formally allowed to execute independently the so called “restricted treatment modalities”; they are also subject to disciplinary law.

This implies that permission to use a professional title is confined to those persons whose names appear in the register. Registration is not automatic. Professional practitioners must submit an application. This will only be approved if the applicant meets the legal requirements, the most important of which is the completion of relevant training. A prerequisite for registration is a "declaration of competency" by the Dutch government.

The Individual Health Care Professions Act

The basic principle behind this law is that the practice of medicine/dentistry is open to all. However, the Act also provides for certain exceptions to this rule. Some procedures may be carried out only by categories authorized to do so by law. The procedures in question are those which entail a considerable risk to the health of the patient if performed by people who are not experts. The performance of such a procedure by an unauthorized practitioner is a criminal offence. The procedures relevant to dentistry specified in the Act are as follows:

- surgical procedures
- punctures and injections
- general anaesthetic
- procedures involving the use of radioactive substances.

Reserved procedures may be carried out by two groups of professional practitioners: those with direct authorization and those who may perform the procedure on the order of the former and are thereby authorized. The Act grants direct authorization to doctors, dentists and midwives and specifies which group is authorized for each category of reserved procedures. This entitles them to perform reserved procedures on their own initiative, i.e. they themselves are responsible for deciding whether the procedure is indicated.

Other staff such as dental hygienists and chairside assistants may also carry out reserved procedures, although they do not have direct authorization. Unlike dentists they are not allowed to determine whether a procedure is indicated and must follow

the orders of practitioners with direct authorization. In actual fact, anyone who has been ordered to perform a reserved procedure and who is proficient is thereby authorized to do so.

The dentists are subject to a legal disciplinary code intended to foster and monitor professional standards. Civil law and criminal law do not provide the right instruments for this purpose. However, the disciplinary code and the criminal and civil law can be used in conjunction with one another.

If a disciplinary board considers a complaint justified, it will always take action. It cannot pronounce guilt without imposing a penalty. There are six disciplinary measures, rising on a scale of severity as set out below:

- warning;
- reprimand;
- a fine not exceeding 10,000 guilders;
- temporary suspension from the register for a maximum period of one year;
- partial withdrawal of authorization to practice using a professional title;
- Erasure from the register.

A practitioner who has been struck off as a disciplinary measure cannot be re-registered and is no longer allowed to use the legally protected professional title. This also means that such dentists are no longer authorized to perform reserved procedures for which they had direct authorization.

Other oral health care personnel

Besides procedures regarding dentists, regulations for dental hygienists and denturists exist based on a "declaration of competency". The titles of "mondhygienist" and "tandprotheticus" are also protected under public law. They must meet a number of statutory requirements, the most important of which are of an educational nature. By using a title professional practitioners make it clear to the public and the insurance companies in what field they are in fact experts. In other words, the legally protected title act as an indicator for quality assurance to the public.
No formal regulation exists regarding chairside assistants and dental laboratory technicians.

Licensing of dentists on the basis of a "declaration of competence"

There are four different categories: - dentists with a diploma: -

- from a Dutch dental school,
- formally recognised within the European Economic Area (EEA) in combination with the citizenship of one of the EEA member countries,
- formally recognised within the EEA without the relevant citizenship,
- from a dental school outside the EEA.

A diploma of a Dutch dental school serves the prerequisite of "declaration of competence".

Based on European rules, diplomas of EU dental schools obtained by a EU citizen meet the criteria of freedom of movement which were intended to abolish any

discrimination on nationality as regards employment, remuneration and other conditions of work and employment. The diploma held by a European citizen serves the prerequisite for licensing as a Dutch "tandarts". Limitations to this principle will only be allowed if they can be justified on grounds of public policy, public security or public health.

Non-EU citizens in possession of a EU diploma fulfill the requirement of a "declaration of competence" by the Minister for Health. A "residence permit" by the Minister for Justice and a "work permit" by the Minister for Social Affairs and Employment is needed to be able to register as a "tandarts". In these cases, no other European countries are committed to this Dutch registration.

A diploma of a dental school from outside the EEA, is judged on its equivalence to the level of education of the Dutch dentist. The level of equivalence, sometimes together with the quality of professional experience, is decisive for a "declaration of competence" or permission to work under the supervision of a registered dentist for a shorter or longer period of time. In a case where the level of education is considered to be 'non-equivalent' the applicant is advised to try to enter the dental school.

Assessing the educational level is done by a committee of experts consisting of teachers at the dental schools as well as respected members of the dental profession. The committee considers documentation regarding the curriculum and working experience. The committee may request the applicant to submit himself to a test on knowledge and/or skills.

Based on the judgement of the committee, the formal decision on a request by a non-European dentist, seeking licensing for practising dentistry in The Netherlands, is taken by the competent authority who is the Minister of Health. In these cases, no other European countries are committed to the Dutch decision.

Anne Nordblad

Background

On 4 September 1996 the Ministry of Education set up a committee to examine the need to develop training in dentistry.
Its most important task was to explore possibilities to integrate clinical training included in basic and specialist training into the primary health care system.
Another central task was to evaluate development needs in educational content and its relevance to changes in the population's health needs and to decisions on educational development.

In Finland clinical training included in dental education takes place outside the primary health care system. The problem is that patients using primary health care services are available for clinical training only to the extent that health care centres, public hospitals and university hospitals conclude separate agreements on the matter.
For instance in 1995, only one third of patients in basic clinical training in dentistry were referred by the public health services.

As regards the cost-efficiency of activities, one problem is that the universities´ dentistry units provide a fair amount of clinical treatment, the cost of which is born by the education and science administration. It would substantially clarify the respective financial responsibilities, if clinical training and relevant clinical work were integrated into the primary health care system, and the system were to be compensated for such training costs.

The Committee´s Deliberations

The committee undertook a survey to ascertain the extent and efficiency of cooperation carried out by institutes of dentistry with health care districts and dentistry units in health care centres. On the whole, the responses supported the idea of integration.

Present Dental Education

At present, training in dentistry is provided at the Universities of Helsinki, Kuopio, Oulu and Turku. As a result of decreased educational needs, the Government decided to reduce training in dentistry in 1993. In 1998 the University of Kuopio will cease to provide training in dentistry altogether and the University of Turku will cease to provide initial training.

In 1995 the total number of dental students (including Kuopio) was 702, of whom 549 were undergraduates, 91 postgraduates and 62 graduates studying for a specialist degree.
The total number of degrees awarded was 153, 117 of which were basic degrees, 14 doctorates and 22 specialist degrees.
After cutbacks in training provision, the annual intake dropped to 60 in 1994.
The number of places (totaling 54) in specialist training has not been cut.

Proposals

The point of departure for the committee was that; -
1. Universities will continue to be responsible for training in dentistry;
2. In terms of administration and operations, clinical training included in dental studies will be organised according to the regulations governing educational arrangements;
3. Clinical training included in basic and specialist training will be integrated into the primary health care system. Faculties will agree on the implementation of clinical training with the local authorities (or federations of local authorities) which run health care and university and other hospitals;
4. This integration will not raise costs to the local authorities. The primary health care system will be recompensed for the costs of clinical training on the basis of unit costs. (as in medical training).

To implement this rearrangement in training; -

1. The content of basic and specialist training in dentistry be divided into theoretical education at universities and clinical training at primary health care units;
2. The personnel resources and necessary facilities for theoretical education remain at universities;
3. The personnel resources and necessary facilities for clinical training be transferred to the primary health care system;
4. The position of a person transferring from a university be guaranteed by law according to the same principles as are applied to the transferal of posts from university hospitals;
5. All specialist trainee posts, except those in public dental health, be transferred to the primary health care system;
6. The details of this integration be agreed upon between institutes of dentistry and health care centres according to local circumstances.

Financing of the New Arrangements; -
1. The costs of basic and specialist training in dentistry be recompensed to university hospitals and health care units as in medical training. The estimated annual sum to be paid to the primary health care system would be around 23.5 million marks and would consist of:

2. Basic training in dentistry: 60 degrees annually, about 18 million marks.
The unit cost for the licentiate degree (basic degree) in dentistry is the same as in medical training, about 300,000 marks.
Out of the compensation they receive, the federation of local authorities running a university hospital will pay the cost of training at health care centres on a contractual basis according to the duration of training.

3. Specialist degrees in dentistry: 20 degrees annually, totaling 5.5 million marks.
The unit cost for a specialist degree in clinical dentistry and orthodontics (annually 15 degrees) is three quarters of that in medical specialization, i.e. 225,000 marks. The unit cost for the projected specialization in oral and maxillofacial surgery (about 3 degrees) is the same as in medical specialization, amounting to 300,000 marks.

4. It is proposed that some 20 million be subtracted from the Ministry of Education main class in the state budget and correspondingly added to the main class of the Ministry of Social Affairs and Health to cover the integration of clinical training into the primary health care system.

5. In the case of the universities that provide dental education, corresponding cuts in resources will be gradually implemented over the period 1999—2001.

Student Numbers

1. The annual target number of basic degrees in dentistry be kept at 60. The target should be reconsidered in connection with a review of changes in the structure of oral health care personnel and their professional tasks.

2. The target for specialist degrees in dentistry be kept at 20 for the present. The estimate is that an increase of 10 degrees annually will be required in the future. More dental specialists will be needed in clinical dentistry, orthodontics and public dental health.

3. Internship should be preserved and health care organizations be recompensed for its cost through the system of special state grants as in medical training. This would amount to two million marks per annum.

Numbers of Dentists and Other Workforce Data in the EEA in 1996

Kenneth A. Eaton

Background

The standards achieved by dentists when they graduate from dental schools and their level of clinical competence is a quality issue. The number (quantity) of dentists and other healthcare workers available to provide oral healthcare for a population can have a significant effect on the quality of care provided. "A hungry dentist is a dangerous dentist". It is therefore of great importance to all those involved in dental workforce planning to ensure that an appropriate number of dentists and other providers of oral health care are trained. An over or under supply is potentially hazardous both for the oral health of patients and for the physical, and in the case of oversupply, financial health of dental clinicians.

Workforce planning is a complex issue. In dentistry it involves understanding future need and demand for oral healthcare. A variety of factors influence the planning process including: -

- Epidemiological trends for oral diseases
- The willingness of patients and Governments to pay for oral healthcare
- National laws on - entry to university education
  - who may provide oral healthcare

Although many of these factors vary widely between the countries of the European Economic Area (EEA), European Commission Directive 78/686/EEC allows any dentist, who is an EEA national and who possesses a primary dental qualification from an EEA dental school, to establish practice anywhere in the EEA. To date relatively few of the over 250,000 registered dentists in the EEA have availed themselves of this freedom. Since 1980, the UK has been the principal recipient of EEA dentists with over 700 dentists who qualified in the Republic of Ireland registering with the General Dental Council (GDC). Since 1 January 1995, when Sweden joined the European Union, over 500 dentists with a Swedish qualification have registered with the GDC.

Although Directive 78/686/EEC permits freedom of movement for dentists throughout the EEA, there has been virtually no efforts to try to ensure harmonisation of the quality of clinical skill achieved by the graduates of the 135 or so public and private dental schools within the EEA. However, both Shanley et al. (1997)[1] and Eaton et al.(1998)[2] have found a very wide variation in the undergraduate curriculum hours devoted to the different disciplines within dentistry. Examples included a range of from 16.5 to 450 hours for Periodontology and from 28 to 617 hours for Orthodontics. In addition, Shanley et al. (1997) found that graduates from some dental schools within the EEA had no hands-on clinical training in a range of disciplines during their undergraduate training. Thus, it can be said that at present although the law permits freedom of movement for EEA dentists within the EEA, it does not protect some EEA citizens from receiving treatment from some dentists who have had no clinical training whatsoever in various aspects of dentistry. This is a serious quality issue.

This paper addresses quantitative rather than qualitative issues for 1996 on: -

- the number of active dentists in the countries of the EEA
- population to active dentist ratios in the countries of the EEA
- numbers of graduates from EEA dental schools.

It does not report on Dental Hygienists and Clinical Dental Technicians. In 1996, there were a total of fewer than 15,000 of such clinicians as opposed to 240,000 active dentists. Their overall contribution to the oral health of the population is therefore at present minor.

The data presented were gathered from the responses to questionnaires sent to members of the Council of European Chief Dental Officers (CECDO) and to members of the BIOMED, EURO-QUAL II project[3].

Manpower data **EEA in 1996**

	Population	active dentists	Ratio	Graduated 1996		
				M	F	Total
Austria	8030000	2990	2686			110
Belgium	10143000	7152	1418	52	120	172
Denmark	5351000	4960	1079	50	50	100
Finland	5120000	4785	1070	28	78	106
France	5833000	39500	1477	395	405	800
Germany	82000000	61404	1335	1435	887	2322
Greece	10500000	11460	916	90	110	200
Iceland	267735	280	956			6
Ireland	3600000	1470	2449	39	35	74
Italy	57226000	44642	1282	537	306	843
Liechtenstein	30000	28	1071	-	-	-
Luxembourg	412000	239	1724	-	-	-
Netherlands	15490000	6530	2372	105	105	210
Norway	4370000	3800	1150	49	40	89
Portugal	9920760	2818	3520	110	127	237
Spain	39674000	14877	2667	220	330	550
Sweden	8819000	9000e	980	110	125	235
United Kingdom	58605800	24850	2358	365	349	714
TOTAL	377919295	240813	1569	3595	3067	6768

* Active Dentists are those currently involved in clinical, administrative, educational or research activities related to dentistry. The term does not include dentists who are retired but still registered, overseas or unemployed as dentists.

In 1996 there was a total of 137 public and private dental schools in the EEA. Of these 33 were in Italy and 30 in Germany.

DISCUSSION

At present Germany has by far the largest number of active dentists in the EEA. In 1996 over 35% all new dentists in the EEA graduated from German dental schools. The second largest number of dentists in the EEA is found in Italy, a country that was also the second largest producer of EEA dental graduates in 1996 with 13% of the total. These figures do not indicate present and future demand for oral health care in the countries concerned; whether they intend to decrease or increase the number of dentists graduating from their dental schools and whether the oral health of their populations is improving or worsening. A recent review of one oral health indicator in the countries of the EEA (dental caries levels in 12 year olds) - Eaton, Widström and Renson (1998)[4] suggested that there was evidence of improvement over the last 20 years and postulated that there might well be less restorative work for dentists in the future.

The data show a wide variation in numbers of dentists graduating and in the population to dentist ratios in the different countries of the EEA. They also suggest that unless the countries of the EEA work together to develop an agreed plan for future numbers of dentists and other oral healthcare workers, the phenomena of underemployed and unemployed dentists, experienced in Sweden and now seen in Germany will soon become commonplace in other EEA countries.

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Licensing Examinations in Jordan

Marwan al Habashne

I wish to thank the Council of European Chief Dental Officers for extending an invitation to me to represent my country and to participate in this meeting.

May I acknowledge the help I have received from the organizers both in arranging my visit and making my stay so very pleasant and rewarding.

About 300 dentists a year come to Jordan after having completed their training in other countries. Most of them have studied in Eastern Europe. Their standards vary considerably and they need short courses in specific areas to improve their skills.

In 1973 the Licensing Examination Act No. (17) was passed by the Jordan Parliament. This Act provided for licensing examinations in Dentistry for all foreign graduates seeking to practice dentistry in Jordan. The act stated that "the Objective of the Licensing Examination is to test the safety of the candidate to practice dentistry."

The Act empowered the Minister of Health to appoint the Examining Board and to decide the date and place of licensing examinations.

At this time the examinations are written only. No test of skills is required

Most candidates who have studied in Arab Universities pass the examination, the pass rate varying from 83% to 100%.

Candidates from foreign universities do not fare as well as their colleagues from Arab universities. The pass rate since 1990 has been between 33% and 65%

The number of new dentists on the dental register is steadily increasing with more than 200 dentists a year entering the work force.

There are now over 3000 dentists in Jordan for a population of 4,600,000.

203 government dental clinics provide services to the population

Licensing Exam Results – Jordan

	Arab Universities			Foreign Universities			Total		
Year	**No.**	**Passed**	**%age**	**No.**	**Passed**	**%age**	**No.**	**Passed**	**%age**
1990	31	30	97%	40	30	75%	71	60	85%
1 991	53	48	90%	118	64	54%	171	112	65%
1992	38	33	87%	221	74	33%	259	107	41%
1993	58	52	90%	230	83	36%	292	163	56%
1994	57	48	84%	71	45	63%	128	93	73%
1995	55	51	93%	113	74	65%	168	126	75%
1996	46	46	100%	86	48	56%	132	94	71%
1997	62	52	83%	255	113	44%	317	167	53%
1998	59	56	90%	237	140	59%	332	209	63%

Number of Dentists Licenced per Year and Total Number of Dentists on the Register

Year	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
No licenced	40	128	157	161	257	202	245	207	192	219	240
Total				1465	1618	1921	2167	2375	2567	2780	3020

Discussion

There was some considerable range of opinion voiced in the lively discussion following the presentations in which most of those present took part.

Contributors to the discussion expressed their satisfaction with the quality and content of the presentations and felt that the meeting had made an important start to the discussion of the issue of licensing.

The variations in the training of dentists in different countries were so great as to make mutual recognition of qualifications and licence portability illogical from a scientific and professional standpoint although such legislation was already in place in the EU.

If all universities maintained consistent and universally accepted standards of training and academic curriculum there would be no need for licensing examinations.

Some support was expressed for the idea of licensing based on objective testing of knowledge and skills of the individual rather than automatic recognition based on nationality of the applicant or her spouse or on artificial residence qualifications.

There was strong objection by some participants to the licensing of foreign nationals and possible unfair competition by dentists from poor countries being prepared to accept a lower standard of living than that of the local dentists.

Some delegates reported on and supported a policy of language proficiency being an immutable criterion for licensing even if this would prevent the free flow of dentists and the right to practice their profession wherever they wished.

The converse view was also expressed maintaining that the bars to free practice should be minimal consistent with protecting the health of the community.

It was clear from the discussion that while there was general support for the idea of licensing examinations; much research and discussion would be needed before there could be any practical steps towards implementation.

The question of the difficulties of re-registration was raised.

Those present congratulated the Council and organizers of the meeting and expressed the hope that the subject would continue to be on the agenda of the Council.

Summary by the President - Council of European Chief Dental Officers

Jos van den Heuvel

Today's thorough presentations and animated discussions led to the following conclusions: -

The competency of different people with the same diploma can differ considerably

Minor differences may be acceptable, considerable differences are undesirable, at the least, from a quality point of view

In order to reduce unwanted differences in the competency of dentists at graduation, measures to be taken are: -

- A society (national or supranational) needs to define as precisely as possible what kind of health care worker this society expects a dentist to be

- Dental schools have to consider this description of competency as the minimal level of education

- Research need to be done on the added value of a (supra)national licensing examination provided the level of competencies is met by the dental school education

Licensing is one thing, relicensing is of the utmost importance to assure a continuous minimal level of quality of care. However, no consensus can be noticed regarding the best system of relicensing at this moment

The competency of a dentist is closely related to the competencies of other oral health care personnel. A 'job description' of all oral health care professionals must include aspects of mutual collaboration in favor of the quality of care.

The president will appoint a committee to investigate and make recommendations on the possibility and feasibility of European licensing examinations.

Dr. Moshe Kelman will publish the proceedings of this workshop.

Report on visit to DenX Advanced Dental Systems

Participants in the meeting visited DenX Ltd. on March 21st 1999.
The purpose of the visit was to see one of the possible ways to conduct the practical component of licensing examinations in an objective and controlled environment.

The visit included the Manufacturing, Research & Development and Administrative divisions of the company and a demonstration of DenX's products: DentSim and IGI. DentSim ™ is an advanced simulation system for dental practice and training.

This is a computer based teaching and training simulator. It replaces the conventional linear workbench with a highly sophisticated computerized dental workstation. Much more than a teaching tool, it is a comprehensive information management system that merges established training methods and practice with the synergies of advanced simulation technology.

DentSim is comprised of three main components that interact to create the high correlation between the virtual and real worlds: the patient simulator – a highly advanced unit which mimics the position and moving possibilities of a live patient, a computerized workstation with a state of the art simulation software package, and a tracking system which follows the movements of the users, sends them to an overhead camera and from there, to the computer which displays the image in the virtual world.

The system encourages self-training, allows unlimited practice and equally important, enables users to advance at their own pace. Procedures designed as clinically oriented cases are accompanied by continuous tactile and real time feedback and objective quantitative evaluation of the procedures performed in 3D graphic and textual form. This realistic instruction prepares students for ultimate interaction with real patients.

DentSim can replace the entire pre-clinical lab by proving high quality simulation. Due to it's high effectiveness it can be used in addition to the pre-clinical lab. By rotating students, a small lab can become valuable for training extra-curricular students, those who need extra training, testing, studying for board examinations and screening.

The following universities are users of DentSim technology: Pennsylvania, Colorado, Mississippi, Missouri, USA, Tel Aviv, Israel, Gothenberg, Sweden, Trinity College – Dublin, Ireland, Greifswald, Germany, National University, Singapore, Osaka, Japan.

A Consortium of users was established in 1999, to promote cooperation on research, development and application. New and prospective users are welcome to join.

The participants at the meeting were very interested in this new technology and its contribution to dental training, education, testing, screening and research. Several pointed out that DentSim technology fits in with the move towards standardization which characterizes the EU today in general and specifically in dental education.

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Appendix 1

Social Status of Dentists and Social Perspectives for The Dental Profession
(report on a book)

Lydia Katrova

As a result of the radical social transformations in Bulgaria during the period 1989-1998 the social re-stratification process challenged both communities and individuals in Bulgaria. The restoration of political pluralism and a free market economy facilitated social and professional mobility. Dentists in Bulgaria enjoyed this favorable trend and for a short period of time addressed the restoration of their position as a social group. They re-established the functioning of the Association of Bulgarian Dentists and later registered it under the Public law, regaining the right to open private practices and the autonomy to regulate relevant ethical and professional standards. As a social group they are now in the process of joining the upper middle class stratum (by income and prestige). The reform of the health care system consists of a change from a monopolistic state-organized and state-regulated system to a pluralistic decentralized system, based on the co-existence of market and community oriented programs, autonomous regulation of the labor force, and the implementation of a third party payment system.

The Bulgarian dentists became a typical example of social mobility shaped by factors generated at different levels of the societal structure. At the macro level- restoration of respect for private property and re-stratification in society. At the middle level - decentralization of the public health service, pluralistic ownership and the establishment and implementation of alternative models of health care distribution. At the micro level - personal and professional preparedness of dentists to transform their position from that of dependent employees to self-employed entrepreneurs.

The main purpose of this work is to provide dentists with adequate knowledge on the current state and the future development of the dental profession on the national and international scale in order to help them in changing their socio-professional status during the transition from a totalitarian to a liberal social system. The book is based on a review of theoretical and empirical sources, current statistical data and results of a sociological study of the dental profession in Bulgaria.

The first chapter covers fundamental sociological concepts explaining the formation of the labor market and the establishment of the perception that professional status is an important element of individual and group social status. Social status, social role, social group, social mobility, social adequacy, professional status, professionalization, are discussed, as are higher education, autonomy, authority and ethics in the context of the professionalization of some occupational groups and the deprofessionalization of others under the pressure of a changing social and labor environment. The behavioral and attitudinal orientation of professionals in different working conditions are described following the main concepts of job satisfaction.

Dentistry as a recognized established independent profession, first emerged in Europe in the 17th century, obtaining its modern image by the mid 19th century, with the spread in Europe of academic training, industrialization, modernization and the establishment of modern health systems. The first dental school was opened around 1840. The traditional view of the profession has changed dramatically in the last 20 years. The role of the profession in defining national health policy increases with implementation of health promotion programs. Change in the pattern of diseases and health behavior of patients became an additional reason to start considering the field of dental services as a market place.

Dentists deal in a contractual environment and because of the influence of the previous totalitarian system, have no appropriate skills to recognize the border between market and ethical issues. Informed consent and respect for the autonomy of the patient are presented after a review of traditional and modern concepts on the dignity of the individual and collective values, such as autonomy, justice and veracity .

The challenges now faced by dentists are classified according to origin: generated by the dentists' group itself, by the patients' group, or by the social environment. How dentists perceive these challenges and how they react to the them in different countries is developed through published research papers and recommendations of professional bodies. Improvement of technical facilities, development of teamwork, the search for efficiency and continuing education are some of the keys for successful overcoming of present day difficulties.

The development of the dental profession in Bulgaria is described including situation analysis, demographic trends, mobility and distribution of dentists by type of practice and analysis of social changes in professional status. A field sociological investigation was carried out as a sociological survey including 842 dentists from a total of 1707 dentists working in Sofia. There were three groups: salaried in the public sector (42%), both salaried and as private practitioners (30%) and only as private practitioners (28%) This sample represents about 10% of the total number of dentists working in Bulgaria as of December 1996. The main empirical indicators were related to: 1. Structure of the oral health service - supply and distribution of dentists. 2. Social status of dentists (professional and demographic) 3. Dynamic social status of dentists viewed as structural and circulatory social mobility. 4. Subjective status, viewed as specific to professional behavior and attitudes - professional output and satisfaction with the profession, values shared by professionals in regard with the social status of the profession. The verbal opinions on the current state of the art and the future of dental care and dental education.

The first Bulgarian dental association was set up in 1905. There were then about 50 dentists, graduates of mainly French and German dental schools, for a population of about 3,000,000. The first Faculty of dentistry in Bulgaria was opened in 1952 in the department of dentistry of the Medical faculty of the University of Sofia. The dentist/population ratio changed dramatically in the last 20 years due to primary care orientation. There are 4626 dentists working in the

public sector, and 3,586 dentists registered as private practitioners. A considerable proportion, 1,956 are working mixed. The increase in pluralistic practice is supported by a moderate but persistent decline of the public sector and a very rapid increase of the private sector. The oversupply of dentists is due partly to high feminization of the profession.

The average age of dentists is 39,7 for the salaried dentists group. More than 60% are less than 45. 72,6% of dentists are female. The decrease of the number of dentists working in the public sector is due to their starting private practices. The rate of growth of the private sector is significant and irreversible. Almost all the dentists started their career as salaried. Only 1.4% of dentists registered for private practice before 1973 and 12% after 1991 started their career only as private practitioners. The incentive of the dentists to change to private practice is the perceived desirable status of the private practitioner, working for himself in his own practice. Levels of satisfaction and output are considerably higher in the group of private practitioners. The process of socio-professional identification is determined by socio-demographic trends, professional preparedness and personal attitudes but is significantly influenced by general social factors such as ownership of practices and new legislation. In the value scale of dentists regarding their social status high income and social prestige go along with independence of the profession.

Appendix 2

Visit to D. Walter Cohen, DDS, Middle East Center for Dental Education

This Center was established in 1997 in the belief that the field of dental health presents a unique potential for cooperation, study, mutual support and applied experience and knowledge in the Middle East. With this in mind, the Center can truly form a "Bridge to Peace".

The Center opens its doors to all dental health workers in the region who wish to utilize its facilities, further their studies in dental education, and expand the horizons of dental knowledge in the Middle East.

Among the primary supporters of the Center's courses is the Center for International Cooperation (MASHAV) of the Israeli Ministry of Foreign Affairs. MASHAV serves as a major vehicle for encouraging cooperation in the fields of education between Israel and its neighboring countries.

THE CENTER'S AIMS

- To serve as a center for dental education that will promote cooperation in the field of Dental Medicine between the countries in the Middle East.
- To develop local programs in Oral Health for the benefit of the peoples of the area.
- To provide dentists of the area with state-of-the art knowledge and skills in all disciplines of modern dentistry.
- To encourage joint research between Israeli scientists and their colleagues from the neighboring countries while seeking funds from international organizations to support their research.
- To help in the consolidation of a true peace between Israel and its neighbors.

An International Advisory Committee of the D. Walter Cohen, DDS, Middle East Center for Dental Education decides upon and oversee the activities of the Center.

Applicants are accepted following consultation between the Center's directorate and the local representative in the International Advisory Committee.

Educational Programs offered by the center

This is a preliminary list of programs offered by the Center. Programs may be changed or added according to demand.

Courses will include participation in regular clinical departmental activities, with an emphasis on individual clinical tutorship by specialists and seminars on contemporary topics specific to the corresponding departments.

List of courses, covering general areas of dentistry will include:

1. Periodontics, Endodontics and Oral Biology.
2. Prosthodontics and Restorative Dentistry.
3. Oral Medicine, Oral Diagnosis, Oral Radiology and Oral Pathology.
4. Maxillofacial Surgery and Maxillofacial Reconstruction.
5. Pediatric Dentistry, Orthodontics and Preventive Dentistry.

List of courses devoted to specific dental subjects:

Dental Implantology
Periodontics
Endodontics
Oral Biology
Oral Rehabilitation
Oral Pathology
Oral Radiology
Maxillofacial Surgery
Pediatric Dentistry
Hospital Dentistry

Appendix 3

Guests of Honour
YEHOSHUA MATZA MINISTER of HEALTH
RACHEL MATZA

PARTICIPANTS	ACCOMPANYING PERSONS	COUNTRY
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