MALTESE DENTISTRY IN THE E.C. CONTEXT

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The practice of Dentistry in the European Community is regulated by the Council Directives of 1978 which provide for the activities of and training programmes for dental practitioners (1), and the mutual recognition of qualifications to facilitate the right to freedom of movement and the establishment of dental practices by non-nationals (2).

Together these directives establish the concept of the Eurodentist by providing for a, course in dental surgery similar to that offered by the University of Malta. That is, one integrated with the medical sciences but independent of a medical qualification. Prior to 1978 this was not the norm in a number of European countries where a qualification in medicine was necessary to practice dentistry, training in dentistry not being a prerequisite to practice. This was particularly the case in Italy where the practice of dentistry was limited to medical graduates with no dental training and to physicians specialising in dentistry by virtue of a two year post graduate course. In view of this, when the directives were published in 1978, member countries, then eight in number, were given eighteen months in which to comply, with the exception of Italy which was allowed a period of six years. In 1980 Italy established a degree in odontology and limited practice to dental graduates. However in 1988 the Italian Constitutional Court ruled that medical practitioners could practice dentistry, thus effectively overruling the E.C. directive. The matter is before the European Parliament. (3)

The EC recognises two specialists in dentistry: oral surgery and orthodontics. As the case in Malta, regulations are non restrictive, holders of a basic dental qualification may practice oral surgery and orthodontics. The only restriction is in Denmark where the law prohibits dentists for treating malignancies. In practice this is no restriction as the treatment of these conditions is generally undertaken by a team of medical and dental practitioners. The law in Denmark being satisfied by the inclusion of a medical practitioner, the dental specialist is not excluded from heading the team. (4)

FREEDOM OF MOVEMENT

There are in the community some 151,000 dental practitioners treating approximately 320 million people. An often expressed, but unnecessary, cause for concern is the freedom of movement of practitioners between member states and establishment of practices by non-nationals.

There are presently no figures available to indicate how many practitioners have availed themselves of the opportunity to set up practice in a country not of their origin. The present indications, except for the traditional flow of Irish dentists to the UK, are that the figure is negligible. The number of EC nationals (except Irish dentists) on the UK Dental Register is currently 168 (5). Out of 600,000 medical practitioners practising in the EC, it is estimated that only 2,000 work in a member state other than the one they qualified in.

Despite the emphasis being placed on the removal of artificial barriers to movement of workers between member states, language is and will remain the single most important barrier to movement. Governments have to date regarded foreign language skills as a personal matter and have not effectively invested in this field in educational institutions. It is therefore very unlikely that future generations of European dental practitioners will benefit from multi language education.

That movement of workers between member states has not materialised is perhaps best exemplified by Luxembourg, the smallest, with a population of 389,800 (6) and one of the wealthiest countries in EC, which has not attracted an influx of any category of worker (7).

DENTAL HEALTH, MALTA AND THE EC

As an indication of dental health in Malta and EC two parameters have been selected on the basis of frequency in reporting.

The World Health Organisation in collaboration with the International Dental Federation established a number of global goals for oral health by the year 2,000 (8).

The global goals of 3 DMF (Decayed, Missing or Filled) teeth at 12 years and a 25% reduction in the present levels of edentulousness at the age of 65 and over are considered.

Malta, with a reported DMFT of 2 is one of five European countries to have achieved the WHO/FDI goal, Table I. This comparatively low DMFT is one that has been reported in previous studies (9) (10). In the past this has been partly attributed to the naturally occurring level of fluoride in domestic tap water. This level has markedly decreased since the introduction, in 1984, of reverse osmosis for water production (11). The DMFT in Europe ranges from 2.0 to 7.7.

TABLE I
Average number of Decayed, Missing and Filled permanent teeth (DMFT) in 12 years old children in EC and European countries with pending application to join the EC.

COUNTRY	DMFT
Austria	4
Belgium	3.1
Denmark	3.4
Germany (former F.R.)	6.2
Finland	3.0
France	3.4
Iceland	7.7
Italy	4.0
Luxembourg	-
Malta	2.0
Netherlands	2.4
Norway	4.4
Sweden	3.4
U.K.	3.0

WHO Country Profiles on Oral Health in Europe 1986.

TABLE II
Percentage Edentulousness in 65 years olds and over in EC and European countries with pending application to join the EC.

COUNTRY	PERCENTAGE
Austria	30
Denmark	60
Germany (former D.R.)	58
Finland	65
France	65
Ireland	72
Malta	50
Netherlands	70
Sweden	20
U.K.	79

WHO Country Profiles on Oral Health in Europe 1986.

Of greater concern in Malta is the incidence of periodontal disease of early and late onset (12) (13) and as a major factor in adult tooth loss (14).

The reported percentage edentulousness in 65 year old and over in Europe covers a wide range of 20% to 79%, reflecting not only present but also past, national socio-economic factors. Malta with 50% edentulousness is marginly below the mean value, Table II.

DENTAL MANPOWER

There are at present in Malta 99 dental practitioners of practising age, giving a ratio of 1 dentist for every 3629 population. The ratio in Europe varies from 1 to 1087 to 1 to 10,000, Table III. At the lower end of the scale are Portugal, where the illicit practice of dentistry is institutionalised, and Spain. Both these countries joined the EC in January 1986 and are undergoing the seven year period of adaptation.

The situation in Spain is of significance and concern. Since joining the EC, Spain has introduced the required dental course catering for 1,000 dental graduates annually from 8 dental schools. The number of dental practitioners has consequently increased from 7503 in 1988 to 14,000 in 1992 (15). Of particular concern to the EC are the bilateral agreements whereby Spain recognises degrees from South American Dental Schools. This has allowed for the influx of 4,000 foreign dentists into Spain and provides Spanish students unable to gain a place in a Spanish dental school, with the opportunity to follow a course of studies in South American Dental Schools and return to their country of origin. Another cause for concern is that even with a ratio of 1 dentist for every 5,000 population in 1988, dentists in Spain were experiencing unemployment, largely because of economic factors and the lack of a state dental service (16).

At the other end of the scale are the Scandinavian countries where state organised dentistry has been a priority for a number of years. In Denmark with a dentist-population ratio of 1 to 1099, all children below the age of 18 have since 1971 been entitled to the full range of dental treatment free of charge together with an active programme of prevention. This has resulted in 42% of 18 year olds having no caries experience (17).

It is now recognised that the Scandinavian objective of 1 dentist for every 1,000 population, based as it was on the anticipated dental needs in pre-preventive days and older dental materials and techniques, with replacement and re-replacement of restorations, has resulted in overproduction of dentists. Scandinavian countries have officially recognised this by restricting entry into dental schools.

A more recent phenomenon, is being experienced in the UK, where with a dentist/population ratio of 1 to 3226

and an ever decreasing state subsidised dental service since 1948, bankruptcies in dental practice are not uncommon (18). According to Chancery Court figures, approximately two dentists per week went bankrupt in the financial year 1990-91 (19).

Clearly the question of manpower is a multifaceted one with national habits and economic factors as important considerations. Perhaps as a common denominator for the demand for dental treatment and consequently manpower requirements is the amount spent by the state or dental services. Table IV shows Malta, with an annual per capita expenditure of US$ 1.55 compared to a European mean of US$ 60.33, lacking in this regard. A more realistic figure for 1991 would be in the region of US$3.5 (20).

TABLE III

Dental-Population Ratios in EC and European Countries with pending application to join the EC.

Country	Inhabitants per Dentist	Dentists per 10,000 Inhabitants	Total No of Dentists
Austria	2496	4.0	3004
Belgium (1)	1470	6.8	6688
Denmark (2)	1099	9.1	4662
Germany (former F.R.) (2)	1562	6.4	39608
Germany (former D.R.) (3)	1626	6.1	10390
Greece (2)	1087	9.2	9206
Spain (2)	5263	1.9	7503
France (4)	1587	6.3	34946
Italy (3)	6400	1.6	9000
Ireland (2)	2941	3.4	1211
Luxembourg	2083	4.8	179
Netherlands (2)	1886	5.3	7882
Portugal (2)	10000	1.0	1068
U.K. (2)	3226	3.1	17952

(1) E.C. Official Statistics. Brussels 1991 Basis Year 1987.
(2) E.C. Official Statistics. Brussels 1991 Basis Year 1988.
(3) WHO Country Profiles on Oral Health in Europe 1986. Basis Year 1985.
(4) E.C. Official Statistics. Brussels 1991 Basis Year 1986.

DENTAL MANPOWER SURVEY

In July 1991 a questionnaire was mailed to all 92 dental practitioners in Malta in order to establish present and future patterns of dental practice and manpower requirements. The closing date for replies was extended to March 1992 in order to reach more realistic conclusions. 87% of practitioners answered and the data obtained adjusted to take into consideration all dental practitioners. Since March 1992 eleven new graduates have joined the dental register and one dentist has returned from abroad to start practice in Malta.

Table V gives the results of this survey and indicates a reluctance on the part of dentists presently employed on a full-time basis in the state dental service to move to full-time private practice. The majority of these practitioners preferring to retain their employment with the state service and undertake private practice on a part-time basis. The reduction in the number of full-time practitioners will be more than made up for by new graduates whose employment with the state service is becoming increasingly restricted.

With the present set up and funding of the state dental service and the anticipated natural wastage it is unfortunately not possible to absorb new graduates into this service except for a very limited duration, if at all. This regrettably will have a negative, effect on further training and early exposure.

TABLE IV

Expenses for State Dental Care 1982. E.C. and European Countries with pending application to join the EC (1).

Country	Per person in US$	Per cent of G.N.P.
Austria	35.46	0.39
Denmark	58.62	0.56
Germany (former F.R.)	104.76	0.98
Finland	41.80	0.42
France	75.35	0.70
Iceland	47.53	0.48
Malta (2)	1.55	0.041
Netherlands	48.45	0.51
Norway	67.30	0.50
Sweden	101.70	0.72
U.K.	22.36	0.26

(1) Weber H. 1991. Dentistry in the 21st century - A German View. Dentistry in the 21st Century - A Global Perspective.
(2) WHO Country Profiles on Oral Health in Europe 1986.

Table VI shows that the number of practitioners will rise to 140 in the year 2001 giving a ratio of 1 dentist for every 2512 population or 4 dentists for every 10,000 population.

This figure is in excess of that obtained in the UK, 3.1 dentists per 10,000 population, where under employment of dentists and bankruptcies in dental practice are increasingly being reported. With this ratio it has become necessary to close three Dental Schools in the UK in order to control over production. It is generally accepted in dental circles that a realistic figure for Malta would be 3 dentists per 10,000 population. This figure will be reached by 1995.

A further consideration in Malta is the age distribution of dental practitioners. Table VII shows that 73% of practitioners in Malta are below the age of 40 and 46% below the age of 30.

TABLE V

Malta Dental Surgeons - Manpower Survey 1991. Adjusted.

Employment	Number of Dental Surgeons		
	1991	1997	2001
Full Time Private Practice	34	26	26
Full Time Private Practice (below 8 sessions/week)	7	14	19
Full time Government, no Private Practice	6	1	1
Full Time Government and Private Practice	34	37	26
Part Time Government and Private Practice	3	3	4
Retired	-	1	7
Don't' know	-	2	1
Total	84	84	84
Retired	5		
Not Practising	3		
Total	92		

TABLE VI

Malta Dentist/Population Ratios; Dentists in Private Practice 1991-2001

Year	Inhabitants per Dentist	Dentists per 10,000 Inhabitants	Number of Practising Dentists	Number of Dentists in private practice
1991	4129	2.4	84	78
1992	3629	2.7	96	82
1995	3266	3.1	107	101
1997	2969	3.4	118	114
1999	2721	3.7	129	125
2001	2512	4.0	140	131

Population 359249, Economic Trends November 1991. Malta Government Central Office of Statistics.

TABLE VII

Age Distribution of Practising Dentists. Malta 1992.

Age (Years)	Number	Percentage
Below 30	44	45.8
30 - 40	26	27.1
40 - 50	14	14.6
50 - 60	8	8.3
Over 60	4	4.2

CONCLUSION

The Oral Health of the Maltese population in 12 and 65 year olds compares favourably with that of other European countries.

The course of Dental Surgery at the University of Malta is constantly under review in the light of EC directives and recommendations and it is anticipated that no change to the course content or structure will be needed if Malta's application to join the EC is successful. The university already employs the recommendation of the Advisory Committee on the training of dental practitioners of the EC for a system of voluntary visitations to Dental School (21).

The present intake of 12 students every second year into the course of Dental Surgery in Malta is in excess of the

island's needs and far in excess of the requirements of the State Dental Service in its present form. The over production of dentists in a number of European countries is recognised in the EC and remedial action has in some instances already been taken.

It is suggested that the present student intake into the Dental School be retained but a number of the places offered to foreign students. For reasons of historic development in dental education and also for logistic reasons Italy would appear to be one logical source,and applicants with a knowledge of English would not have a language problem either academically or socially. Reduction in local intake could take the form of the proven method of restricting entry to first preference applicants.

The present level of dental manpower and the age distribution of dentists should, in the light of freedom of movement, be a consideration in EC entry negotiations.

Funding of the State Dental Service should be increased in line with that obtained in EC countries with dental health delivery schemes. The establishment of priority groups for fee assisted dental services should be investigated.

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