Full Results of Eaton K.A., West N.X., Wilson N.H.F., Sanz M. (2021) EFP Survey of Postgraduate and Specialist Training in Periodontology in Europe in 2020. Accepted for publication in European Journal of Dental Education

1. Responses from countries

Twenty-nine countries out of a possible 31 completed or partially completed the questionnaire. They were:

Austria Azerbaijan* Belgium Croatia Denmark Finland France Georgia* Germany Greece Hungary Ireland Israel Italy Lithuania Morocco* Netherlands Norway Poland Portugal Romania Serbia Slovenia Spain Sweden Switzerland Turkey Ukraine* United Kingdom (UK)

* Indicates Associate member

Responses were not received from:

Czech Republic and Russia*

2. Name of specialty

Of the 29 countries, 26 reported that the specialty was known as Periodontology or Periodontics. In Finland it is a sub-specialty of Clinical Dentistry. In Germany periodontists may be described as either Fachzahnarzt für Parodontologie or Spezialist/Spezialisten für Parodontologie. In Serbia, at the time of the survey, the specialty was known as Periodontology and Oral Medicine.

Official Recognition

3. Is Periodontology an officially recognised specialty in your country?

The responses were 'yes' in 17 countries: Azerbaijan, Belgium, Croatia, Finland, Hungary, Israel, Lithuania, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Sweden, Switzerland, Turkey and the UK and 'no' in 11 countries: Austria, Denmark, France, Georgia, Greece, Ireland, Italy, Morocco, Netherlands, Spain and Ukraine. In Germany, the specialty is recognised only in one Lande (Federal State), which is Nordrhein-Westfalen.

4. Who keeps a list of officially recognised specialists in your country?

In nine of the countries (Azerbaijan, Belgium, Croatia, Hungary, Norway, Romania, Slovenia, Switzerland and Turkey), where Periodontology is recognised as a specialty, the Ministry of Health keeps the list of specialists.

In Israel, Slovenia and in Switzerland the list is kept by the country's Dental Chamber (Association) and/or Periodontology Society in association with the Ministry of Health.

In Lithuania, Poland, Portugal and Serbia the list is kept by the country's Dental Chamber (Association) and/or Periodontology Society.

In Finland and in Sweden, it is kept by a Government Agency (National Superior Board for Health and Welfare).

In the UK, the national regulator for dentistry (the General Dental Council) holds the list.

In the Netherlands and Spain, although Periodontology is not officially recognised, the periodontal societies of these countries keep lists of those who have completed formal (three-years) training in the specialty.

Although there is no specialty of Periodontology in France, Greece and Ukraine, respondents from these countries reported that the Ministry of Health would keep the list if the specialty of Periodontology was recognised.

In Germany, the specialist qualification Fachzahnarzt für Parodontologie (ZÄKWL) is awarded only in Nordrhein-Westfalen and is officially recognised only in that part of Germany. However, dentists, in all parts of Germany, may display this qualification in their dental offices/clinics. The ZÄKWL can only be obtained after three years full-time training in Periodontology. There is also a second specialist qualification, the Spezialist/Spezialisten fùr Parodontologie der Deutschen Gesellschaft fùr Parodontologie (DG PAROD) which also requires three years full-time training. It is not officially recognised but is a registered trademark.

In Denmark, although there is no recognition of the specialty of Periodontology, the Danish Society of Periodontology keeps a list of its members, who have completed training in Periodontology and the respondent from Denmark reported "we know they have been recognised abroad."

Respondents from five countries (Austria, Georgia, Ireland, Italy and Morocco), where the specialty is not recognised, did not answer this question.

Training Programmes

5. Are there Masters or other postgraduate training programmes in dental specialties (such as Periodontology), in your country, which do not lead to official recognition as a specialist?

Seventeen countries replied 'yes' and gave details in answer to question 6.

Eleven countries (Azerbaijan, Croatia, Denmark, Finland, Hungary, Lithuania, Morocco, Norway, Romania, Serbia, Slovenia) replied 'no'. There was no reply to this question from Portugal.

6. If 'yes', please list the Masters programmes.

The three-year EFP approved Periodontal courses, held in a number of countries, are listed in this section, together with other Masters and Diploma programmes reported by respondents to this survey

Austria – two Austrian universities offer Masters programmes in Periodontology and Implantology.

Belgium - answered 'yes' but gave no details. However, it is known that there are three-year full-time EFP approved programmes at the Universities of Leuven and Liege

France – Diploma programmes are run at the Universities of Marseille, Nantes and Paris (Descartes) in addition to three-year EFP approved courses at the Universities of Paris (Diderot) and Strasbourg.

Georgia - Reported three programmes but did not specify if they were Masters programmes and gave no details of their length.

Germany - Reported MSc programmes in German at five universities (Steinhuis-Hochschule Berlin, Dresden, Freiburg, Danube Private University and Luxembourg).

Greece - Reported programmes at the dental schools in Athens and Thessaloniki , including a Masters degree in Oral Biology and a diploma in Periodontology.

Ireland – A three-year full-time, EFP accredited Clinical Doctorate programme at Trinity College Dublin.

Israel - Advanced General Practice Programme - one year in general dentistry followed by three-year full-time EFP approved courses at the Hebrew University of Jerusalem, the Healthcare Campus Haifa and the University of Tel Aviv

Italy - Answered 'yes' but gave no details of where Masters programmes in Periodontology took place. However, it is known that the three-year full-time EFP programme is run at the University of Turin

Netherlands - Answered 'yes' but gave no details. However, it is known that a three-year full-time EFP programme is run at the Academic Centre of Dentistry, Amsterdam (ACDA).

Poland replied 'no' but added that a Masters programme was planned.

Spain - Reported Masters programmes in Periodontology are run at eight universities (Madrid Complutense, Barcelona, Granada, Oviedo, Santiago de Compostela, Sevilla, Universidad Pais del Vasco and Valencia). The ones at Madrid Complutense and Barcelona are three-year full-time EFP approved programmes.

Sweden - There is a three-year full-time EFP approved programme at the University of Gothenburg. Those who have satisfactorily completed this programme can apply to the National Board for Health and Welfare for a Swedish specialisation certificate in Periodontology. This Board judges if individuals can be accepted to work as a specialist in Sweden. Three year specialist training in Periodontology is also provided in nine public service oral health clinics which are in Gävie, Gothenberg, Jonköping, Linköping, Malmö, Örebro, Stockholm (2) and Umeä

Switzerland - Reported Masters programmes in Periodontology and Implantology at the universities of Basel, Berne and Zurich. The programme at Berne is a three-year full-time EFP approved programme.

Turkey - Reported that there are at least 80 dental schools throughout Turkey of which 66 run postgraduate programmes. A three-year full-time EFP programme is run at Yeditepe University.

Ukraine listed a number of extended continuing education courses in Periodontology, but it was unclear, whether or not they lead to a Masters degree.

UK - Three-year Masters/Doctoral programmes in Periodontology are run at King's College, London, Queen Mary College, London, the University of Central Lancashire, the University of Sheffield and University College London, Eastman Dental Institute. The three-year fulltime programme at the Eastman is EFP approved. The Eastman also runs a full-time one-year MSc programme and has just started a part-time MSc in Periodontology by distance learning. MSc in Periodontology programmes are also run at the Universities of Essex, Manchester, Plymouth, Sheffield and Ulster. In addition, the Universities of Essex, Kent and University College London, Eastman Dental Institute run a MSc programmes for dental hygienists and therapists. A three-year full time paid hospital-based scheme is also available in the South West Region of the UK for training leading to become a specialist in Periodontology.

Entry to specialist training

7. Is a period of postgraduate training and/or experience in general dentistry required before starting training in your specialty (Periodontology)?

Twelve countries answered 'yes'. For details see the answers to question 8.

Twelve countries answered 'no'. They were: Azerbaijan, Croatia, France, Greece, Hungary, Italy, Lithuania, Poland, Romania, Serbia, Turkey and Ukraine.

Three answered that it was not applicable, as there was no recognised specialty of Periodontology in their countries, which were Denmark, Georgia and Morocco.

Belgium and Portugal did not answer this question.

8. If 'yes', how many years since initial qualification as a dentist?

In Switzerland - 2 - 3 years.

In Austria, Finland, Ireland, Norway, Sweden and UK - 2 years.

In Netherlands, at least 2 years is preferred.

In Germany and Israel, 1 or 2 years depending on the programme to be undertaken

In Slovenia, 1 year

In Spain, some, but not all, programmes require at least 1 year.

Specialist Training

9. How many years full-time does specialist training in your specialty (Periodontology) take?

Twenty-one countries answered three years full-time.

Israel answered 3.5 years full-time

Austria answered that there were no full-time courses in Periodontology in Austria.

France, Georgia, Portugal and Ukraine did not answer the question.

Denmark and Morocco answered that as there was no specialist training in Periodontology in their countries the question was not applicable.

10. Can specialist training in Periodontology be completed part-time?

'No' in 16 countries.

'Yes' in seven which were: Austria, Finland, Hungary, Norway, Poland, Serbia and Sweden.

France, Georgia and Portugal did not answer the question.

Croatia gave an ambiguous answer.

Denmark and Morocco answered that as there was no specialist training in Periodontology in their countries the question was not applicable.

11. Does it take place only in a university?

'Yes' in 14 countries.

'No' in nine, which were Azerbaijan, Finland, Germany, Hungary, Israel, Netherlands, Slovenia, Sweden and Ukraine.

Georgia, Portugal and Romania did not answer the question.

Poland gave an estimate that 5 - 10% of the three-year programme took place outside a university in a private clinic.

Denmark and Morocco answered that as there was no specialist training in Periodontology in their countries the question was not applicable.

12. If specialist training takes place in additional locations (outside a university), please list them and state what percentage of time takes place at these locations.

Nine countries reported that specialist training takes place outside a university for at least some time during the training programme. However, in three countries which answered 'yes' to this question, the training takes place in university hospitals. This is also the case in some countries, which answered 'no', such as the UK.

The three countries were Azerbaijan where 70% of specialist training time and in Slovenia and Ukraine where 100% is spent in the university hospital/clinics.

In Finland, clinical training was reported as taking place partly in a university hospital and partly in Public Healthcare Clinics.

In Germany at least one year of the three-year Fachzahnarzt fùr Parodontologie has to take place in a university department of Periodontology, or a comparable institution and for the Spezialist/Spezialisten fùr Parodontologie qualification at least two of the three years have to take place in an accredited university department of Periodontology or a comparable institution.

In Hungary clinical training takes place in municipal (public) periodontal specialty practices and in private periodontal practices for up to a maximum of 80% of the three-year programme.

In Israel, up to 14% of training can take place in army clinics and in hospital departments. During the 3.5-year training programme, six months include rotations to Oral Medicine and Oral Maxillofacial Departments.

In the Netherlands, in the third year of specialty training, 40 days take place in a recognised periodontal practice which has been approved by the university concerned.

In Poland, up to 10% of training can take place in private periodontal clinics.

In Sweden, apart from the EFP programme at Gothenberg university, as mentioned in the answer to question 6, three year full-time training in Periodontolgy takes place in public service dental clinics in major Swedish towns and cities.

13. Does a specialist trainee have to pay for their specialist training?

'Yes' in 13 countries which were: Austria, Belgium, France, Ireland, Israel, Italy, Lithuania, Netherlands, Portugal, Serbia, Spain, Ukraine and the UK.

In Germany, 'no' for three-year programmes but 'yes' for one-year MSc programmes.

There was no answer to this question from Greece or Morocco.

In the other 13 countries it was reported that specialist trainees do not have to pay for their training.

14. If they have to, how much do they pay per year?

In the 14 countries, where trainees were reported as having to pay for their training, the annual fees ranged from \notin 1,400 in Ukraine to \notin 47,000 for trainees from non-EU countries in Ireland. They were reported as:

Austria	€ 14,500
Belgium	€ 2,000
France	€ 10,500 (at one university for a diploma programme)
Germany	€ 10,000 (for a one year MSc. no fees for the 3 year programmes)
Greece	€ 6,000
Hungary	€ Unspecified and only for training taking place in private clinics
Ireland	€ 25,000 (if from EU) € 47,000 if not from an EU country
Israel	€ 17,500 to €25,000
Italy	€ 18,000
Lithuania	€ 6,500
Netherlands	€ 22,500
Serbia	€ 5,000
Spain	€ 5,000 to €20,000
Sweden	$ \in$ 39,000 for postgraduate trainees at Gothenberg from outside Sweden
Ukraine	€ 1,400 (for some long continuing education courses in Periodontology)
UK	€ 30,000

Ten countries reported that fees were not charged to trainees. Another four countries (Denmark, Georgia, Morocco and Portugal) either stated that it was irrelevant as specialist training in Periodontology did not take place in their country or did not answer this question.

15. During training do trainees receive a salary? The answer to this question was 'yes' in 14 countries which were: Azerbaijan, Belgium, Croatia, Finland, Germany, Hungary, Ireland, Lithuania, Romania, Serbia, Slovenia, Sweden, Switzerland and Turkey.

It was 'no' for nine countries.

Six countries (Denmark, Georgia, Italy, Morocco, Norway and Portugal) either stated that it was irrelevant as specialist training in Periodontology did not take place in their country or did not answer this question.

16. If 'yes' who pays the salary university/hospital/government/other organisation?

Of the 14 countries which reported that trainees were paid, only two countries (Azerbaijan and Ireland) answered university only. In others, payment was usually from more than one source which frequently included a hospital in combination with a university or the government or the Health Ministry. The answer from Croatia was "where they work".

17. If other organisations (pay trainees) which one(s)?

Apart from the organisations mentioned in the answers to question 16, public clinics (Sweden) and private dental practices/offices (Germany, Hungary and Serbia) were also mentioned. In Israel and the UK, if trainees are in the military, they are paid salaries by the military whilst they train.

18. How much salary per year are trainees paid?

Reported annual salaries ranged from €2,500 in Azerbaijan to €47,500 in Finland and were as follows:

Azerbaijan	€ 2,500
Belgium	€ 15,000 to €20,000
Croatia	€ 11,000
Finland	€ 47,500
Germany	€ 30,000
Hungary	€ 12,000 to €15,000
Ireland	€, 9,100
Lithuania	€ 15,777
Romania	€ 9,600
Serbia	€ 12,000 to €20,000
Slovenia	€ 15,000
Sweden	€ 45,000
Switzerland	€ 36,000
Turkey	€ 12,000

Assessment

19. Are trainees assessed during training?

Four countries (Denmark, Georgia, Morocco and Portugal) did not answer this question. In all the other 25 countries reported that trainees were assessed during training.

20. If 'yes', who is responsible for assessment examinations?

In 24 of the 25 countries, it was reported that assessment was by a university, in the following countries in collaboration with other organisations as follows:

With hospitals in Israel, Poland, Slovenia and Sweden.

Within practice mentors or specialist supervisors in Netherlands, Slovenia and Sweden.

With Royal Colleges of Surgeons in the UK.

Four countries (Denmark, Georgia, Morocco and Portugal) did not answer this question

21. Is there an end of training examination?

'Yes', in all 25 countries. Four countries (Denmark, Georgia, Morocco and Portugal) did not answer this question

22. If 'yes', who is responsible for the end of training assessment examination?

Solely universities in 11 countries which were Austria, Belgium, Croatia, France, Greece, Italy, Lithuania, Norway, Romania, Serbia, Turkey.

Universities and government bodies in two countries (Azerbaijan and Hungary).

Universities and hospitals in two countries (Finland and Sweden), followed by approval from the National Board for Health and Welfare.

Universities and the EFP in three countries (Ireland, Netherlands and Spain). The EFP was not mentioned as an examiner by several countries where the EFP approved programme is run.

Universities and the specialist society in two counties (Germany and Switzerland).

Universities and Royal Colleges of Surgeons in the UK.

National Examination Boards in three countries (Israel, Poland, Slovenia).

Ministry of Health in Ukraine.

Four countries (Denmark, Georgia, Morocco and Portugal) did not answer this question.

23. Which of the following aspects are included in the end of training assessment:

Written examination, oral examination, objective standardise examination (OSCE), presentation of a portfolio of treated cases, other (please specify).

Austria	Written and Portfolio	
Azerbaijan	Written, Oral, OSCE, Portfolio	
Belgium	Written, Oral, Portfolio	
Croatia	Oral and Portfolio	
Denmark	Not applicable no specialists training in Periodontology	
Finland	Written and Portfolio (competence-based assessment from 2020)	
France	Written, Oral, OSCE, Portfolio	
Georgia	No answers given	
Germany	Oral and Portfolio for 3 year programmes, Written, Oral and Portfolio for MSc	
Greece	Written, Oral and Portfolio	
Hungary	Oral, OSCE, Portfolio	
Ireland	Written, Oral, Portfolio, Thesis and defence	
Israel	Written, Oral, Portfolio, Unseen examination of treatment cases	
Italy	Written, Oral, OSCE, Portfolio	
Lithuania	Portfolio and Publication/Poster Presentation	
Morocco	No answers as no specialist training in Periodontology in Morocco	
Netherlands	Written, Oral, OSCE, Portfolio, Research Thesis and Literature Review	
Norway	Oral, OSCE, Portfolio, Research Project	
Poland	Oral and National Specialisation Test	
Portugal	No answer given	
Romania	Written, Oral	
Serbia	Oral and OSCE	
Slovenia	Oral, Portfolio, Presentation of Research	
Spain	Oral, Portfolio, Draft or published Research Paper	
Sweden	Written, Oral and Portfolio	
Switzerland	Oral, Portfolio	
Turkey	Written, Oral, OSCE, Portfolio	
Ukraine	Written, Oral, OSCE, Portfolio (not at all Universities)	
UK	Written, Oral, Portfolio	

Registration after completion of specialist training

24. Can those who have passed the end of training assessment register and work as specialists immediately?

Seven Countries (Denmark, Georgia, Greece, Italy, Morocco, Portugal and Spain) did not answer this question as there is no specialist training in Periodontology in Morocco and there is no official specialist register for Periodontology in the other six countries. Two other countries (France and Ireland) answered 'no' and explained that there was no specialist register/list for Periodontology in their countries. In Ireland dentists who have completed specialist training in Periodontology are allowed to advertise with the words "practice limited to Periodontology."

The Netherlands answered 'no' as there is no official register for specialist periodontists. However, one is kept by the Dutch Periodontal Society (NVvP).

In Sweden, there is often a short wait, for administrative reasons, between completing specialist training and obtaining confirmation from the national registration body.

In the UK, those who have completed a three-year full-time training in Periodontology also have to pass an examination set by the Royal Colleges of Surgeons before they can apply to register as specialists.

In the other countries, where there is a specialist list for Periodontology, those who have completed an end of training assessment have no delay in registering and can work as specialists immediately.

25. If there is a wait between successfully completing specialist training and being able to work as Periodontal specialists, how long is it?

In the Netherlands, there is no official specialist list for Periodontology. However, the Consilium Parodontologicum maintains a list of those who have successfully completed a three year full-time training in Periodontology and during the two years after completion of training have built up a portfolio of treated cases and been successfully evaluated by the Consilium which is run by the Dutch Society of Periodontology (NVvP). The NVvP then recognises them as Periodontists.

In Slovenia, after successfully completing training in Periodontology, it is possible to work immediately as a specialist periodontist in the Public Dental Service. However, a further five years is required before newly qualified periodontists can work in private clinics as periodontists.

26. Are there any requirements in your country for those on a specialist register to be reassessed at regular intervals or to complete a minimum number of hours of continuing education in the specialty?

Twelve countries (Austria, Azerbaijan, Belgium, Germany, Hungary, Lithuania, Netherlands, Romania, Serbia, Slovenia, Ukraine and the UK) answered 'yes'.

Germany answered 'yes' and 'no' as there is no requirement for Fachartzt für Paradontologie or those who have completed an MSc in Periodontology. However, there is a requirement for those who have registration as a "DG PARO-Spezialist für Paradontologie", who must renew their registration every six years by providing evidence of attending at least five periodontal congresses or seminars in Periodontology over the previous six years. There is a similar requirement in Austria. In Azerbaijan, Belgium, Germany, Hungary, Lithuania, Netherlands, Romania, Slovenia, Ukraine and the UK, the requirement is to attend approved oral health continuing education regularly and prove this to registering organisations at five yearly (seven yearly in Serbia and Slovenia) intervals. The requirement in terms of /points credits/hours varies from country to country and it appears that in none of the countries is it less than 100 hours every five years or 140 hours every seven years.

In the Netherlands, in order to remain on their list of periodontal specialists the NVvP requires dentists to complete the following tasks/actions:

180 hours of continuing dental education very five years
Working on referred patients for a minimum of two days per week
Treating a minimum of 50 referred periodontal patients per year
Annual completion of a comprehensive questionnaire evaluated by the Consilium
Parodontologicum
Give at least one lecture per year to dental hygienists and/or dentists and publish once a year in a dental magazine
Take part in inter-collegial reassessment performed by the NVvP
Be a member of the NVvP
Be a registered dentist in the Netherlands
Perform a patient satisfaction survey at least once every five years
Nine countries (Croatia, Finland, France, Ireland, Israel, Norway, Poland, Sweden, Turkey) answered no.

Seven Countries (Denmark, Georgia, Greece, Italy, Morocco, Portugal and Spain) did not answer this question as there is no specialist training in Periodontology in Morocco and there is no specialist list in Periodontology in the other six countries.

27. In your country are those registered as dental specialists permitted to continue to work as general dentists?

'Yes' in 23 countries. 'No' in Belgium and France. Not applicable in the Netherlands as Periodontology is not officially recognised. 'No' from Georgia, Morocco and Spain.

28. Additional comments

Austria -"In Austria "periodontology as a specialty is not recognised. The Austrian Society of Periodontology recognises dental professionals with a specialty degree from abroad as specialists, or dentists who finished the part-time postgraduate courses available in Germany (DGParo, Online Master Periodontology (Ratka Krüger), or Krems University."

France -" In France some universities offer postgraduate training in Periodontology and sometimes in Implantology (Toulouse, Marseille, Paris, Nantes). They offer either university Diplomas or Certificates of Higher Education. There is one professional Master (degree), two in Paris and two EFP programmes in Paris and Strasbourg."

Germany - "The DG PARO appreciates the efforts of EFP to seek EU specialist recognition for Periodontology. It would be helpful for official recognition of the "DG PARO-Spezialist für Paradontologie" in Germany to have specialty recognition at the European level."

Hungary - "In Hungary, it is not mandatory for periodontal specialty practice to be a limited to periodontics. Very few limit their practice to periodnontics; the majority provide crowns and bridges, perform dento-alveolar surgery and practice implant dentistry."

Portugal - "The Portuguese Dental Association has recently allowed dentists, who have received appropriate training and assessment, to be awarded the title of Specialist in Periodontology. A list of specialists in Periodontology will be created. However, the relevant regulations are still being drafted and until they have been finalised and agreed by the Portuguese Dental Association, the Portuguese Society of Periodontology is unable to answer many of the questions in the questionnaire."

Explanatory note - The Portuguese Dental Association is the competent authority (regulatory body) for dentistry in Portugal.

Serbia - "Currently, the specialisation in Periodontology and Oral Medicine is still joint. The procedure for separating these specialties into separate ones is in progress and should be completed by the end of 2020."