

The Diversity of Pediatric Residency Programs across Europe: Admission Procedures, Curricula and Duration of Courses

Ruya Meric, MD¹, Roy Gavin Stone, MD², Vasile Valeriu Lupu, MD³, Søren Lomholt, MD⁴, Marija Slobodanac, MD⁵, Balázs Andras Maár, MD⁶, and Enrica Manca, MD⁷

The European Young Paediatricians Association¹ (EURYPA) is an independent pan-European scientific association created with the aim of supporting the educational efforts of the new generations of European pediatricians. The overall purpose is to improve the health of children through networking, educational initiatives, training, multicenter research projects, and sharing of opportunities among pediatric residents, trainees and young pediatricians.² The purpose of this commentary is to describe the activities of EURYPA and to discuss the issue of the diversity of pediatric residency programs across Europe, with the aim of contributing to the debate on how these programs should evolve in the context of the different European changing and often diverging healthcare systems.

The EURYPA Association: Foundation and Current Goals

EURYPA was founded in 2015 through the efforts of delegates belonging to the young pediatricians and residents sections of 11 major national European pediatric societies. Its activities developed in close collaboration with the European Paediatric Association (EPA), the Union of the National European Paediatric Societies and Associations (UNEPSA), with whom EURYPA shares common efforts to promote children's rights to health, equity, and social justice.^{3,4}

The first formal meeting was held in October 2015 in Padua, Italy, promoted by the Italian Society of Pediatrics and the Turkish Pediatric Association, and the first congress celebrated in Istanbul in December 2015. EURYPA has held 6 international meetings throughout the years, in collaboration with several national European pediatric societies. The statute of the organization was instated in June, 2019, in Dublin, Ireland during the EURYPA congress organized in parallel to the 9th Europediatrics meeting, and the assembly elected the current board of directors (**Table I**; available at www.jpeds.com). Eligibility criteria for EURYPA membership include medical doctors in pediatric training and pediatricians within 5 years of completion of pediatric residency. To facilitate the further development of the membership,

registrations are completed through a website or by mail.¹ There are no age restrictions on membership, which expires after 10 years of completion of residency.

Increasing Opportunities through Networking

Varying healthcare systems, diverse cultures, differing and often incompatible national economic strategies, and geographical issues are barriers to the development of a homogeneous pediatric training across Europe. Although achieving a uniform program is outside of the scope of EURYPA, efforts toward improvement are not.⁵ Free movement within and across the European Schengen border-free zone and implementation of European working directives, have changed the workplace for better and contributed toward equal opportunity for pediatric trainees across Europe.⁶ However, availing of this opportunity and embarking into different "healthcare ecosystems" is difficult without local knowledge opportunities and chances for networking and communication.⁷ Among the goals of EURYPA is to help trainees to overcome these barriers.

To this purpose, EURYPA is working actively to create a platform for networking and communication among European residents and young pediatricians through symposiums, congresses, courses, and summer schools. EURYPA is also actively maintaining and expanding its networking among the member countries, through sessions hosted by national European pediatric societies (in Moscow in February 2020).

Through the EURYPA link program developed online, individual members will have a reference person in each member country who will act as a local focal point to gather and distribute information regarding the circulation from 1 EURYPA member state to another. This network of collegiality aims to provide a resource to implement the local knowledge needed to promote exchange of educational and scientific information,

EPA	European Paediatric Association
EURYPA	European Young Paediatricians' Association
UNEPSA	Union of the National European Paediatric Societies and Associations

From the ¹Department of Pediatrics, Istanbul Medical Faculty-Cerrahpasa, Istanbul, Turkey; ²Department of Pediatric Respiratory Medicine, Children's Health Ireland at Crumlin, Dublin, Ireland; ³Department of Pediatrics, "Grigore T. Popa" University of Medicine and Pharmacy, Iasi, Romania; ⁴Department of Pediatrics, Viborg Regional Hospital, Viborg, Denmark; ⁵Department of Pediatrics, Health Centre Đakovo, Đakovo, Croatia; ⁶Department of Pediatrics, Heim Pál National Pediatric Institute, Budapest, Hungary; and ⁷Department of Pediatrics, University of Foggia, Foggia, Italy

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Table II. Length of education, type of admission procedure to residency, and work hours of residents in pediatrics in 8 European nations

Country	Years of medical school	Admission to residency by test	Admission to residency by interview	Years of residency course	Work hours/week
Croatia	6	No	Yes	5	40
Denmark	6	No	Yes	5	37
Hungary	6	None	–	5	40
Ireland	4-5	No	Yes	7	42
Italy	6	Yes	No	5	38
Romania	6	Yes	No	5	35
Russia	6	Yes	No	2	40
Turkey	6	Yes	No	4	40

international training programs, and imparting skills as well as work opportunities for young European pediatricians.

Diversity in Admission Procedures, Duration, and Pediatric Training Curricula of Residency Courses in Europe

Developing a comparable and assessable medical education systems is not an easy task in Europe. A previous study performed by EPA/UNEPSA in 2014 showed profound diversities among the EU28 postgraduate pediatric programs, which were attributable to a multiplicity of factors.⁸ In 2019, the EURYPAs working group on education, through its networking and information sharing platform, started a project aiming to explore the diversity among pediatric residency programs in Europe. The preliminary report, discussed during the annual EURYPAs-EPA/UNEPSA joint conference in Istanbul, studied key diversity issues, including admission procedures, duration of courses, type of education and curricula, night shifts and salary, in 8 European EU (Ireland, Romania, Italy, Hungary, Denmark, Croatia), and other countries (Turkey, Russia).⁹

A major difference between countries shown by the EURYPAs report is the variable duration of pediatric training. In each of the 8 countries studied, medical degrees are awarded after the completion of a 6-year degree program. However, the duration of pediatric postgraduate education is quite variable; in Ireland, a residency in pediatrics lasts 7 years; in Hungary, Denmark, Italy, Romania, and Croatia it is 5 years; in Turkey 4 years; and in Russia 2 years. Differences exist also in the admission procedures; Russia, Italy, Romania, and Turkey require various types of admission tests, whereas Denmark, Croatia, Ireland, and Hungary enroll the residents through different kinds of interview processes. Working hours per week, not including night shifts, show differences between the national systems studied between EU and non-EU countries, and also within EU countries (Table II).

A further diversity shown by the EURYPAs preliminary report is the difference of pediatric curricula between the various countries, which in several cases leads the governments to issue different kind of professional titles, causing a substantial later confusion in describing and assigning competences to pediatricians. This inconsistent terminology is

particularly confusing in reference to the organization of community and children's (nonhospital) first-contact services, because significant differences exist among the various pediatric healthcare systems in Europe, where the 3 existing main models of pediatric care are based on whether primary care general physicians, primary care pediatricians, or combinations of both are primarily responsible for children's care.¹⁰ Existing differences between curricula may also reflect the absence of postgraduate education programs, including primary care pediatrics in some European nations.¹¹ The EURYPAs report showed that in all 8 countries studied, residents in pediatrics receive training in secondary and tertiary care. However in Romania, Denmark, and Ireland there is very little or no training in primary care pediatrics (Table III; available at www.jpeds.com). Although the management of first-contact services is in fact a well-recognized social issue in Europe, it is subjected to frequent changes of political strategy and policies of the single nations, and often challenged by economic contingencies, as shown by the 2009 global crisis.¹²

Conclusions

The future of pediatric healthcare in Europe will be a serious challenge in the next years. It may be characterized not only by a shortage of pediatricians, as anticipated by several studies, but also by a shortage of well-trained newly accredited pediatricians.¹³⁻¹⁵ EURYPAs is fully engaged in studying and showing the contradictions and seemingly irreconcilable differences of the diverse European health systems, with the aim to raise the attention of legislators about the need of a unitary vision, leading to the development of effective and coherent pediatric training programs in Europe. ■

Reprint requests: Ruya Meric, MD, Department of Pediatrics, Cerrahpasa Medical Faculty, Istanbul University Cerrahpasa, Istanbul, Turkey. E-mail: ruya90@gmail.com

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Table I. 2020 EURYPA organizational chart: Board of directors

President	Ruya Meric, MD, Istanbul Medical Faculty-Cerrahpasa (Turkey)
Vice President	Roy Gavin Stone, MD, Children's Health Ireland at Crumlin (Ireland)
Secretary General	Vasile Valeriu Lupu, MD, "Grigore T. Popa" University of Medicine (Romania)
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Treasurer	Balazs Andras Maar, MD, Heim Pál National Pediatric Institute (Hungary)
Assistant Treasurer	Enrica Manca, MD, University of Foggia (Italy)

Table III. Clinical work settings included in the training of pediatric residents in 8 European nations

Country	Primary care	Secondary care	Tertiary care
Croatia	•	•	•
Denmark	–	•	•
Hungary	•	•	•
Ireland	–	•	•
Italy	•	•	•
Romania	–	•	•
Russia	•	•	•
Turkey	•	•	•