Balkan Med J 2025;42:376-9

Who Will Care for Our Children? Understanding the Lower Preference Rates for Pediatrics in Türkiye

Kaan Can Demirbaş[1], Cem Çakmak[1], Seha Saygılı[2], Nur Canpolat[2], Özgür Kasapçopur[3]

[1]Department of Pediatrics, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye
[2]Department of Pediatrics, Division of Pediatric Nephrology, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye
[3]Department of Pediatrics, Division of Pediatric Rheumatology, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye

"The true measure of a community's standing is how well it attends to its children-their health and safety, their material security, their education, and their sense of being loved, valued, and included in the families and communities into which they are born".[1]

The well-being of children has been defined by several organizations using a variety of domains, including material security, physical health, education, and emotional/social outcomes. Child health has always been one of the key indicators of these core domains, and it has been evaluated and improved using objective measures such as mortality rates, vaccination rates, chronic disease prevalence, nutrition, and physical activity.[2,3] These factors are all closely related to the quality and quantity of a nation's pediatric workforce. However, concerns are growing regarding the capacity of the pediatric workforce to meet increasing demands globally, and Türkiye is no exception.[4] This viewpoint aims to report on the current pediatric workforce challenges in Türkiye, focusing on recent trends in residency training and vacancy rates.

After completing their undergraduate education, physicians in Türkiye must pass the National Medical Residency Program Exam (TUS) to begin their residency training. This exam is administered biannually by the Student Selection and Placement Center (OSYM) that subsequently places trainees in residency programs in collaboration with the Ministry of Health and all educational institutions. To specialize in pediatrics, medical doctors must complete four years of training, followed by an optional three-year subspecialty program, which also requires passing a similar exam to enter. After completing both pediatrics and subspecialty training, doctors are required to serve a two-year compulsory service at locations decided by the state.

In the first residency exam in 2024, the pediatrics specialty received the largest share of residents, accounting for 9% of the total 9,521 residency positions. During this period although the fill-up ratio appeared to be 88%, 52% of the pediatric positions remained unfilled, which was the second-highest ratio after pediatric surgery positions (54%) (Figure 1a). Furthermore, 19 of the 92 medical institutions that offered pediatrics training positions had zero placements. This worrying trend in pediatric residency programs is not a recent development. Between 2019 and 2023, an average of 34% of pediatric residency positions remained unfilled, with considerable fluctuations from 1.8% in the second half of 2022 to 60.2% in the second half of 2023 (Figure 1b).[5] Although these trends highlight concerns regarding the declining interest in pediatrics, the data alone cannot provide a complete picture of the situation or predict future shortages. The variation in unfilled positions over recent years suggests that multiple factors may influence specialty choice and can only be an indirect indicator of potential shortages. This highlights the need for a more nuanced and detailed analysis of the issue.

One of the primary challenges in assessing the needs of the pediatric workforce is accurately predicting future demand. In the 1980s, the ideal child-to-pediatrician ratio was considered to be approximately 4,000:1. However, more recent estimates suggest a target of 1,400:1 due to the growing healthcare needs.[6,7] However, the exact amount of practicing pediatricians in Türkiye, and thus the children-to-pediatrician ratio, is unavailable. The most relevant data from 2014 indicates that there are six pediatricians per 100,000 people in Türkiye, which is significantly lower than the European Union average of 12.5 pediatricians per 100,000.[8] According to the same year's population statistics, the number of pediatricians in Türkiye was approximately 5,000, resulting in a child-to-pediatrician ratio of 4,574:1, which is well above the proposed optimum value.[9]

The latest figures regarding the healthcare workforce in Türkiye indicate that almost 200,000 medical doctors, with varying levels of

Corresponding author: Özgür Kasapçopur, Department of Pediatrics, Division of Pediatric Rheumatology, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, İstanbul, Türkiye
e-mail: ozgurkasapcopur@hotmail.com

Received: October 24, 2024 **Accepted:** November 12, 2024 **Available Online Date:** 01.07.2025 • **DOI:** 10.4274/balkanmedj.galenos.2024.2024-10-100

Available at www.balkanmedicaljournal.org

ORCID iDs of the authors: K.C.D. 0000-0003-0620-8155; C.Ç. 0000-0003-1987-1300; S.S. 0000-0002-2424-6959; N.C. 0000-0002-3420-9756; Ö.K. 0000-0002-1125-7720.

Cite this article as: Demirbaş KC, Çakmak C, Saygılı S, Canpolat N, Kasapçopur Ö. Who Will Care for Our Children? Understanding the Lower Preference Rates for Pediatrics in Türkiye. Balkan Med J.; 2025; 42(4):376-9.

seniority and experience, are actively practicing in the country. This number aligns with the strategic planning and predictions of the Ministry of Health in the previous decade, as the number of medical schools and training hospitals has increased since 2014. Considering the latest data on pediatric residency vacancies in the last decade, it is safe to assume that the number of pediatricians in the country should be between 8,000 and 10,000. Furthermore, compared to 2014, children (ages, 0-18) comprise a lower percentage (26%) of the country's population.[10,11] Thus, although the exact number of physicians who finished their pediatric training or pediatricians who finished their subspecialty training remains unknown, the 4,754:1 ratio of 2014 would have increased. However, this alone is not enough to indicate that accessibility to pediatricians is adequate.

Another significant challenge to ensuring proper pediatric care is the unequal distribution of the workforce across Türkiye. Some

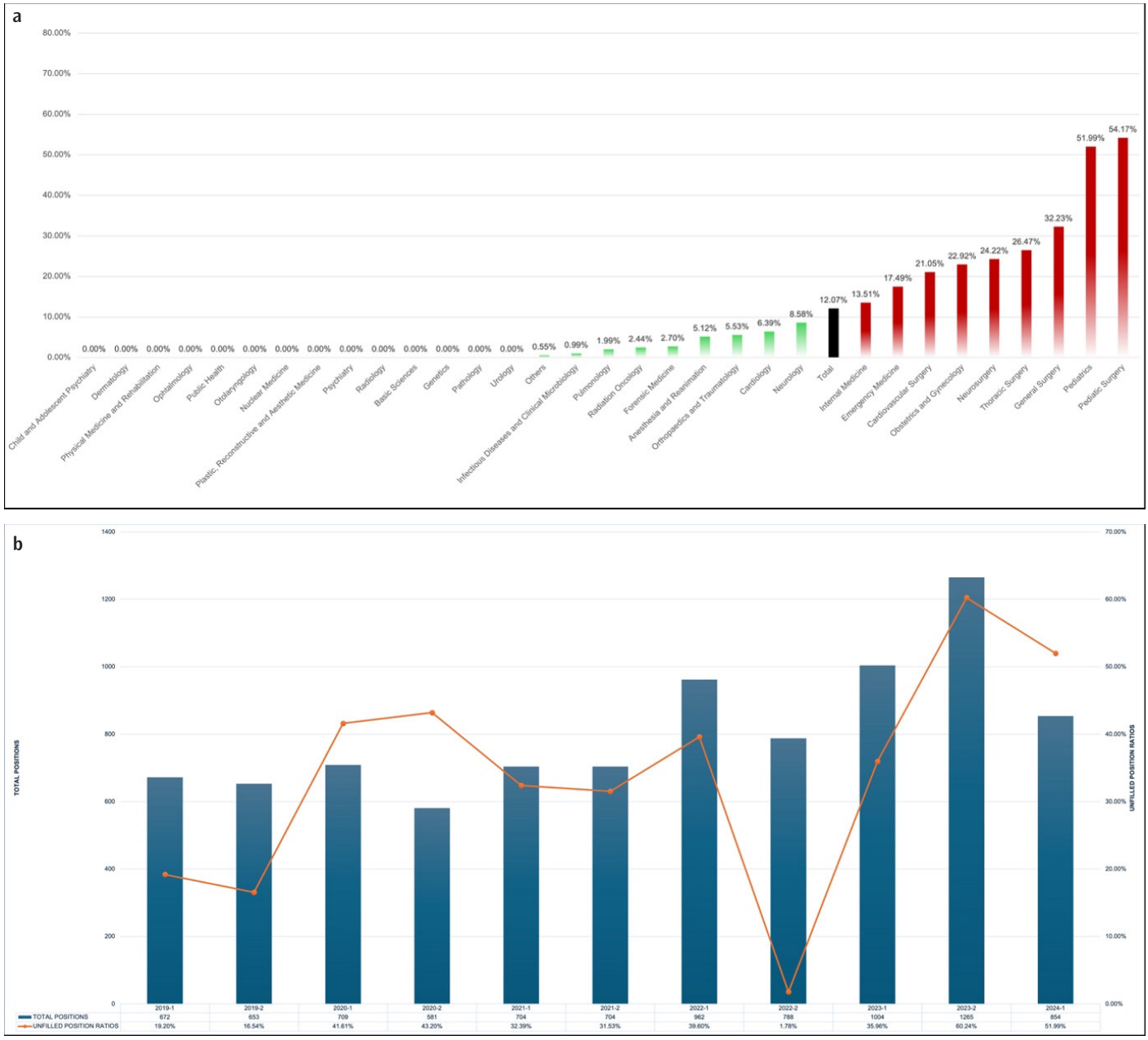

FIG. 1. (a) Percentage of unfilled positions in each specialty following the recent residency exam (2024) in Türkiye. Basic sciences include anatomy, biochemistry, biophysics, pharmacology, physiology, histology, embryology, and microbiology. Others include family medicine, military medicine, underwater and hyperbaric medicine, sports medicine, and space medicine. (b) A retrospective overview of the number of positions that opened-up for pediatric residency and the ratio of unfilled vacancies between 2019 and 2024 over 11 exam sessions.

regions in the country have the least number of physicians. Yet, these are the areas with the densest pediatric population (Figure 2). Furthermore, although the urban parts of the country have the highest number of doctors per 100,000 people, the Eastern and Southern parts of the country, which have the highest birth rate and densest child population, have the lowest number of doctors.[11-13]

The proposed optimal child-to-pediatrician ratio is not a strict rule, as each country has its own needs and resources. Determining the optimal child-to-pediatrician ratio of a country requires the collection of more data regarding the demographics and overall health status of the pediatric group, as well as the quantitative and qualitative analyses of the workforce.[4] Because the numbers are not enough to perform a quantitative analysis, it is challenging to discuss the specific healthcare needs of children across the country. Current statistics on hospital visits, chronic disease rates, subspecialty referrals, and the number of other closely related professions are highly anticipated. However, because the number of positions is largely determined by institutional demands and Ministry of Health decisions, a low fill rate might indicate that future pediatricians are inadequately trained.

Many factors influence how medical student's choose their specialty. In addition to the heavy workload generated by the high number

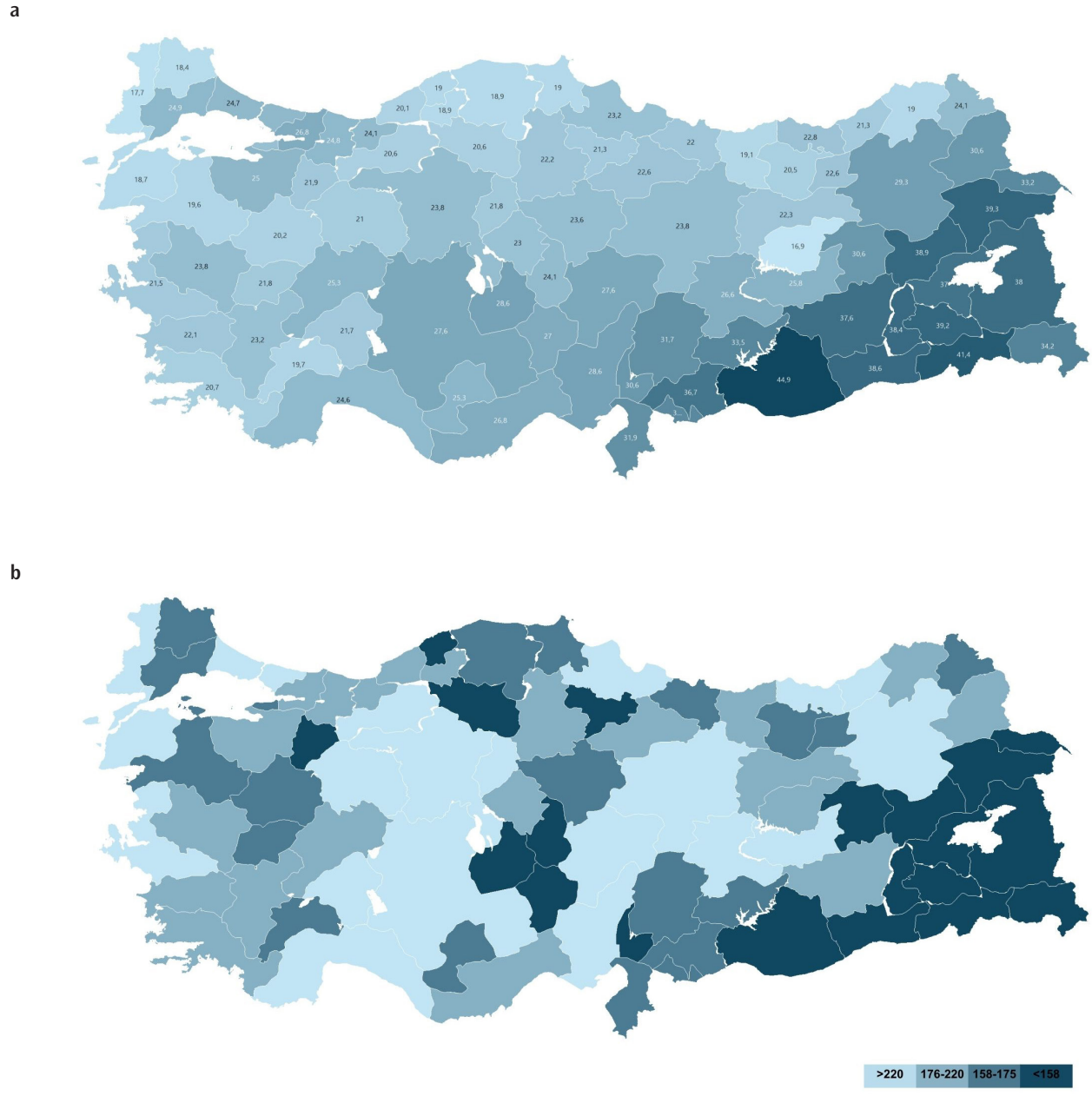

FIG. 2. (a) The ratio of the pediatric population by province in 2022. (b) The number of physicians per 100,000 people in the same year.

of patients per pediatrician, factors such as job satisfaction, future perspectives of the specialty, academic and personal goals, work-life balance, financial expectations, and quality of education play a critical role in shaping a medical student's preference for pediatrics. These factors also play a crucial role in influencing a physician's choice for other subspecialties already suffering from shortages.[4]

A data-driven approach is crucial to address the challenges facing the pediatric workforce in Türkiye, where the ideal child-to-pediatrician ratio of 1,400:1 remains unmet, particularly in rural areas. The shortage of pediatricians and declining interest in the field highlight the need for governmental organizations, healthcare planners, and pediatric associations to invest in research and data collection. Understanding workforce dynamics via targeted initiatives will inform strategic planning, ensure better distribution of care, and guide interventions that prioritize quality and supply. Strengthening the pediatric workforce is not only a health policy issue but also a fundamental commitment to the well-being of children.

Authorship Contributions: Concept- K.C.D., C.Ç.; Design- K.C.D., C.Ç.; Supervision- S.S., N.C., Ö.K.; Data Collection or Processing- K.C.D., C.Ç., S.S., N.C., Ö.K.; Analysis and/or Interpretation- K.C.D., C.Ç.; Literature Search- K.C.D., C.Ç.; Writing- K.C.D., C.Ç., S.S., N.C., Ö.K.; Critical Review- S.S., N.C., Ö.K.

Conflict of Interest: No conflict of interest was declared by the authors.

REFERENCES

1. Adamson P, Bradshaw J, Hoelscher P, Richardson D. Child poverty in perspective: an overview of child well-being in rich countries - a comprehensive assessment of the lives and well-being of children and adolescents in the economically advanced nations. Innocenti Report Card; French, Italian, Spanish, 2007. [CrossRef]
2. Kasapçopur Ö. Poverty and discrimination: big enemies of children all over the world. Turk Arch Pediatr. 2023;58:564-56. [CrossRef]
3. Statham J, Chase E. Childhood wellbeing: a brief overview. Loughborough: Childhood Wellbeing Research Centre, 2010. [CrossRef]
4. Vinci RJ. The pediatric workforce: recent data trends, questions, and challenges for the future. *Pediatrics*. 2021;147:e2020013292. [CrossRef]
5. OSYM. National Medical Residency Program Exam Guidelines, 2019-2024. [August 2024]. [CrossRef]
6. Leslie L, Rappo P, Abelson H, et al. Final report of the FOPE II pediatric generalists of the future workgroup. *Pediatrics*. 2000;106:1199-1223. [CrossRef]
7. Ehrich J, Burla L, Sanz AC, et al. As Few Few pediatricians as possible and as many pediatricians as necessary. *J Pediatr.* 2018;202:338-339.e1. [CrossRef]
8. Council of Higher Education. Current status of health education and health workforce in Türkiye. 2014. [CrossRef]
9. Turkish Statistical Institute. Statistics on children, 2015. [August, 2024]. [CrossRef]
10. Turkish Statistical Institute. Statistics on children, 2023. [August, 2024]. [CrossRef]
11. Turkish Statistical Institute. Health and social security, 2024. [August, 2024]. [CrossRef]
12. Bora Başara B, Soytutan Çağlar İ, Aygün A, et al. General Directorate of Health Information Systems, Ministry of Health. Annual Health Statistics; 2022. p. 216 [CrossRef]
13. Turkish Statistical Institute. Statistics on children, 2022. August, 2024]. [CrossRef]