

# Pediatric Dermatology Workforce Shortage Explained

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The Society for Pediatric Dermatology (SPD) was established in 1975, and the pediatric dermatology workforce shortage began shortly after. In 1986, Honig and Burke<sup>1</sup> reported that opportunities in pediatric dermatology were limited and that pediatric dermatologists were predominantly located in larger teaching hospitals and selected private practice settings; furthermore, only approximately 20% had patient populations comprising more than 75% children.<sup>1</sup> Positive changes have occurred since that time, with more practitioners dedicated to pediatric dermatology and increased opportunities within the specialty. The SPD has expanded to a thriving group of collegial pediatric dermatologists now topping 1200 members worldwide.

Although the SPD has strongly influenced practice development in pediatric dermatology, there are fewer than 300 board-certified pediatric dermatologists in the United States and approximately double that number of pediatric dermatology practitioners. The deficiency is glaring based on the national population alone. The US Census Bureau reported 325,719,178 individuals living in the United States (as of July 1, 2017).<sup>2</sup> With approximately 75 million children in the United States and estimates that 22.8% of the population is younger than 18 years,<sup>3</sup> there currently is 1 pediatric dermatologist for every 120,000 children or more.

As if the numbers alone were not adequate, a number of publications have addressed the benefits of pediatric dermatologists in both dermatology and pediatrics training and furthermore in pediatric care. A 2004 survey of dermatology program directors and chairpersons regarding the issue of the pediatric dermatology workforce shortage revealed that 45 of 94 (47.9%) programs employed a pediatric dermatologist and 24 (25.5%) had been looking to hire one for more than a year.<sup>4</sup> Although more pediatric dermatologists have joined the workforce, it is not surprising that programs with no pediatric

dermatologists want them. First, pediatric dermatologists dramatically improve the quality of training with regard to pediatric dermatology education and can increase dermatology residents' comfort level with children. In a survey of a group of graduating third-year dermatology residents, dermatology residency program directors, and pediatric dermatology fellowship program directors by Nijhawan et al,<sup>5</sup> residents who were trained in a program with one or more full-time pediatric dermatologists were more likely to feel competent treating children and to feel satisfied with their training program's pediatric dermatology curriculum than residents without contact with a full-time pediatric dermatologist (50.0% vs 5.9% [ $P=.002$ ] and 85.3% vs 52.9% [ $P<.001$ ], respectively). The availability of a pediatric dermatology fellowship further enhanced satisfaction. Residents in programs with no full-time pediatric dermatologist on staff were more likely to be somewhat or extremely dissatisfied with their pediatric dermatology training. Residency program directors were more satisfied with their curriculums when there was one or more pediatric dermatologist on staff ( $P<.01$ ).<sup>5</sup>

Programs with pediatric dermatologists also offer easy access to a mentor in the field. In a 2010 survey of pediatric dermatologists (published in 2014), Admani et al<sup>6</sup> reported that 84% (91/109) of respondents (board-certified pediatric dermatologists) cited mentorship as the most important factor influencing their career choice. Exposure to the specialty was noted as a key motivating factor. In my opinion, the actual inclusion of a pediatric dermatology fellowship, whether the position is filled or not, appears to increase the chances of expansion and retention in the field. In the 2014 SPD workforce survey, more than 62% (61/98) of respondents were fellowship trained.<sup>7</sup> In 2004 there were only 6 pediatric dermatology fellowship training programs. We have come quite far now with 36 fellowships as of August 12, 2018.<sup>8</sup> The cost of education of course is not simple when pediatric dermatology

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fellowships are unfunded by the Accreditation Council for Graduate Medical Education; however, it is clear that the initial investment can create ongoing returns in pediatric dermatology.

Furthermore, due to the outpatient burden of skin disease in a pediatrics practice, providing pediatric trainees with contact with a pediatric dermatologist is needed. Prindaville et al<sup>9</sup> performed a review from 2006 through 2010 of the National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey databases, which revealed that 9% of 23 million pediatric visits during this time period were for dermatologic diseases; therefore, knowledge of pediatric dermatology is vital to pediatrician training.

As if there was not enough evidence that pediatric dermatologists are in high demand, SPD pediatric dermatology workforce surveys from the last 5 years, which will soon be updated, show similar indications.<sup>7,10</sup> Fogel and Teng<sup>11</sup> showed that 60% of surveyed pediatric dermatologists (N=226) were academic and 81% were salaried. Unlike previous data,<sup>1</sup> the investigators showed that children constituted 79.5% of respondents' patient populations. The academic practice environment favored by the majority of pediatric dermatologists was associated with seeing fewer patients per week and longer wait times (approximately 60 days for a pediatric dermatologist vs 15 days in other practice environments).<sup>11</sup> Therefore, the demand continues to be unmet even in many institutions with pediatric dermatology practitioners in place.

For the medical student or resident seeking a career in pediatric dermatology, it appears that finding and working on projects with mentors likely is the key to stepping in the field. From my own experience, pediatric dermatologists are extremely friendly and open to supporting career development in earnest students. Reach out to potential mentors months before starting desired electives, as you are competing with other students and pediatrics, dermatology, and emergency medicine residents. Joining and attending meetings of the SPD is a great way to find direction in this friendly and collegial field. Additionally, pediatric dermatology sessions at the annual meetings of the American Academy of Dermatology are a wonderful way to experience the excitement of the field. As a pediatric dermatologist in practice for almost 2 decades, I can honestly say that the field is always intellectually stimulating and evolving rapidly through enhanced understanding of disease pathogenesis, genetics, and therapeutics. Helping children and their parents/guardians never gets boring.

The solution to improving the size and accessibility of the pediatric dermatology workforce is not simple and likely starts from the bottom up. More than 75% of pediatric dermatologists favor implementing systems to encourage medical students to pursue a career in

pediatric dermatology.<sup>7</sup> Increasing resident exposure to dedicated pediatric dermatology training time enhances satisfaction.<sup>5</sup> Increased funding of fellowships can help these students and residents meet their goals. Current fellowship training programs now total 36, but not all approved institutions have been able to support a post-graduate year 5 (PGY-5) or higher fellow, and in my experience some institutions have avoided adding a fellow due to lack of funding internally. The average pediatric dermatologist earns \$100,000 less than colleagues who treat adults, which is an impediment to the expansion of the field.<sup>10</sup> This disparity may chase away practitioners, especially those with medical school debt. Debt forgiveness programs, enhanced practice development, and better base pay for pediatric dermatologists could positively impact growth in this specialty. Dermatology and pediatrics training programs need to dedicate more money and developmental support for pediatric dermatologists as a way to invest in the quality of pediatric dermatology education for their trainees. By recognizing the true value of the academic contributions of pediatric dermatologists, dermatology residency programs can invest in producing trainees with greater aplomb and acumen in pediatric dermatology.

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