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EDITORIAL

Making More Child and Adolescent Psychiatrists: Responding to the National Emergency in Mental Health in Children and Adolescents

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In October 2021, the American Academy of Child and Adolescent Psychiatry (AACAP), American Academy of Pediatrics, and Children's Hospital Association declared a national emergency in mental health for children [1]:

> Rates of childhood mental health concerns and suicide rose steadily between 2010 and 2020 and by 2018 suicide was the second leading cause of death for youth ages 10-24. The pandemic has intensified this crisis: across the country we have witnessed dramatic increases in Emergency Department visits for all mental health emergencies including suspected suicide attempts… More than 140,000 children in the United States lost a primary and/or secondary caregiver, with youth of color disproportionately impacted.

The magnitude of the crisis was underscored when Admiral Vivek Murthy, the US Surgeon General, released the December 2021 Advisory on Protecting Youth Mental Health [2]: "The future wellbeing of our country depends on how we support and invest in the next generation." Dr. Murthy [2] emphasized that this crisis began long before the onset of the COVID pandemic, lockdowns, and social isolation:

> Before the COVID-19 pandemic, mental health challenges were the leading cause of disability and poor life outcomes in young people, with up to 1 in 5 children ages 3 to 17 in the U.S. having a mental, emotional, developmental, or behavioral disorder. Additionally, from 2009 to 2019, the share of high school students who reported persistent feelings of sadness or hopelessness increased by 40%, to more than 1 in 3 students. Suicidal behaviors among high school students also increased during the decade preceding COVID, with 19% seriously considering attempting suicide, a 36% increase from 2009 to 2019, and about 16% having made a suicide plan in the prior year, a 44% increase from 2009 to 2019. Between 2007 and 2018, suicide rates among youth ages 10-24 in the U.S. increase by 57% and early estimates show more than 6,600 suicide deaths among this age group in 2020.

While the solution to the current child mental health crisis in the US will span the continuum of prevention and treatment, the ongoing shortage of child and adolescent psychiatrists is a critical weak spot in the nation's ability to respond to this crisis. To quantify the severity of the child and adolescent psychiatry (CAP) workforce shortage, the Substance Abuse and Mental Health Services Administration (SAMHSA) [3] estimated the number of practicing CAP physicians at 8,000–9,000 in the year 2018. By SAMHSA's calculations, to meet treatment need for children with *serious* mental illness, the USA needed at least an extra 48,000–49,000 practicing CAP physicians [3]. This estimate does not account for the increase in children with severe mental health problems over the last 4 years; the workforce shortage has likely worsened in that time. While the current child mental health crisis was not of psychiatry's making, psychiatry educators must be part of the solution. Psychiatry educators have great influence on both the quantity and quality of CAP graduates working to help the nation's children. Psychiatry educators can advocate to increase the number of CAP physicians in training and are the ones who determine the appropriate training programs to produce CAP physicians who provide quality care in an evolving health care system.

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We have gathered a collection of papers for *Academic Psychiatry* on the topic "New Paradigms for Child and Adolescent Psychiatry Training." Much of the material was first presented at the CAP caucus sessions at the 2019, 2020, and 2021 annual meetings of the American Association of Directors of Psychiatric Residency Training (AADPRT), which centered on the need to improve recruitment into CAP fellowships as a means to grow the CAP workforce in the USA. Presentations at the 2020 AADPRT CAP caucus were repeated at AACAP's 2020 annual meeting.

Current State of Recruitment into CAP

We turn first to a description of the current state of recruitment into CAP fellowship training. In "Child and Adolescent Psychiatry Fellowship Program Participation in the National Resident Matching Program Match: Trends and Implications for Recruitment" [4], Williams et al. describe changes in the number of CAP training slots offered and the number of applicants for those slots over the last 25 years. While not all CAP fellowship programs participate in the National Resident Matching Program (NRMP) Match (and so data on programs that recruit outside the Match are omitted), this paper provides the best available data on current trends in recruitment. The authors found that the number of slots offered through the Match has increased steadily over the last 25 years. This increase suggests that the sponsoring institutions recognize the growing need for CAP physicians. However, the data also show that the number of applicants is increasing more slowly than the number of training slots. In other words, continuing the current recruitment and training practices will not attract enough applicants to relieve the workforce shortage.

Motivation for and Obstacles to Pursuing CAP Training

Next, we have three papers that examine motivations for and obstacles to medical students and psychiatry residents pursuing fellowship training in child psychiatry: "An Exploratory Survey of Career Choice, Training, and Practice Trends in Early Career Child and Adolescent Psychiatrists and Fellows" [5] by Mann et al., "Medical Student Interest in Straight-From-Medical-School Child and Adolescent Psychiatry Specialization" [6] by Norris et al., and "Addressing the Nationwide Shortage of Child and Adolescent Psychiatrists: Determining Factors that Influence the Decision for Psychiatry Residents to Pursue Child and Adolescent Psychiatry Training" [7] by Cheng and Mohiuddin. All three papers found that those trainees who enter CAP training do so for reasons that include "content of specialty," "fit with personality, interests, and skills," "wanting to work with children," and "helping society."

Notably, when queried about obstacles to pursing training, psychiatry residents [7] and medical students [6] yielded divergent responses. The three classes of psychiatry residents that Cheng and Mohiuddin surveyed [7] did not feel that 5 years of training to be able to treat adults and children was excessive, and they did not see length of training as an obstacle to pursuing CAP training. On the other hand, the fourth year medical students surveyed by Norris et al. [6] did report strong interest in shorter tracks to CAP practice. Of the 32 students who identified either psychiatry or family medicine as their first-choice specialty, 21 responded that a 4-year program that would train them to see adults and children would be of great interest. Significantly, the students who stated pediatrics was their first choice expressed interest in a 3-year CAP-only training option as most attractive. These same first-choice-pediatrics students indicated that they wanted to spend minimal time in adult psychiatry training. It appears that to "woo" medical students headed to family medicine or pediatrics to CAP, shortening the course for CAP training might be helpful. None of these three papers querying medical students, psychiatry residents, child psychiatry fellows, or early career CAP physicians found that student loan burden was perceived as a substantial obstacle to pursuing CAP training.

Taken together, these papers also provide important lessons on the timing of interventions to maximize trainees' interest in CAP training. For most CAP fellows and early career CAP physicians in the Mann et al. paper [5], interest in CAP started in medical school. For the medical students surveyed by Norris et al. [6], 16 of 22 (73%) who indicated that psychiatry was their first-choice specialty also expressed an interest in any pathway to CAP training, whether that pathway was 3, 4, or 5 years long. However, Cheng and Mohiuddin's survey of psychiatry residents [7] found that interest in pursuing any fellowship training declined with each year of residency training. These same residents stated that length of training was not the obstacle; rather, they had simply lost interest in child psychiatry. It seems that the period of maximum interest in child psychiatry is in medical school.

What is the reason for this attrition in interest in CAP fellowship training after psychiatry residency begins? While it is not addressed by the current studies, the heavy emotional burden on physicians who work with children and adolescents with mental illness must be considered. The practice of psychiatry involves joining with patients who have been traumatized and whose joy and potential are being crushed under the weight of mental illness. CAP work involves witnessing the devastating effects that abuse and trauma have on children in real time. CAP physicians experience the limits of their power to prevent the transformation of a healthy-but-sensitive child into an adolescent with schizophrenia. Being able to work with a broken heart is part of the job, and many medical

students and psychiatry residents decide that CAP is not the job they want. The emotional labor of CAP work may be one reason a waning interest in fellowship training is seen as psychiatry residents gain more exposure to CAP during their residency. If so, the solution to the workforce problems will lie partly in finding ways to make the joys of CAP work—the fun of play, optimism in the resilience of children and adolescents, and the satisfaction of team-based practice—outweigh the sorrows.

Programs to Grow the Pipeline

In line with the finding that medical school may be the optimal time to engage trainees in child psychiatry and motivate them to pursue CAP training, our next set of papers describes interventions designed to identify interested students during medical school and even as undergraduates. In "Psychiatry Match Rates Increase After Exposure to a Medical Student Mentorship Program: A Multisite Retrospective Cohort Analysis" [8], the authors describe their program, which included direct clinical experience working with children and families, a seminar series, involvement in scholarly work in CAP, and attending an annual conference. These programs were sponsored by the Klingenstein Third Generation Foundation and were piloted in 2002, but the study compared Match rates into psychiatry before the programs' implementation to the "after" period between 2008 and 2019. When compared to control programs, the mentorship-participating schools increased by 30% the odds of students matching into psychiatry. We look forward to learning whether increases in matching into CAP fellowship will follow as this study cohort progresses through training.

In "Increasing Interest in Child and Adolescent Psychiatry During Medical School: Launching a Summer Immersion Experience for Medical Students" [9], Shapiro describes a less intensive, but promising, child psychiatry elective piloted with medical students. This elective, composed of readings, discussions, and a student project, was designed not only to foster interest in CAP but also to bring to the CAP pipeline more students who identify as underrepresented in medicine: "Equity, inclusion, and diversity must be central in education, care, and recruitment of the workforce pipeline. A diverse workforce is better able to respond to the needs of populations from a variety of backgrounds in clinical care, advocacy, teaching, and research; in addition, diversity drives excellence and improves outcomes, performance, and creativity" [9].

Lastly, not content to wait until medical school, Budimirovic and Province [10], in "Increasing Interest in Child and Adolescent Psychiatry Through a Structured Tutorial Program," describe the success of their structured shadowing practicum for undergraduate students.

Length of Training Program for CAP

Because of the perception that pipeline programs will not be adequate to grow the CAP workforce quickly enough to meet the present mental health crisis in US youth, AACAP formed a taskforce on the crisis in recruitment. This taskforce integrated audience polling data from the 2020 AADPRT CAP caucus and 2020 AACAP member forum (available on request from the corresponding author), which showed broad support for creation of a 4-year training track. At the AADPRT meeting, 67% of the audience members who responded to polling were in support of a 4-year track. At the AACAP meeting the following fall, 89% of respondents to the polling at the member forum were in favor of a 4-year track. Support was even stronger for a direct-from-medical school match, with 89% at AADPRT and 93% at AACAP in support.

After consultation with AACAP's leadership and executive committee, the taskforce decided to proceed with development of a proposal for a 4-year training program that applicants would match into in postgraduate year 1. The program would lead to board eligibility in adult, child, and adolescent psychiatry. This 4-year track would be a supplement to existing training pathways. The taskforce is currently vetting this proposal with AADPRT, the Accreditation Council for Graduate Medical Education (ACGME), and the American Board of Psychiatry and Neurology, with the intention of pursuing a pilot through the ACGME's Advancing Innovation in Residency Education process.

The proposal for the 4-year pilot borrows heavily from the curriculum of triple board programs. In their letter to the editor, Kleinschmit et al. [11] describe the 5-year triple board programs, which, despite their condensed training course, have had tremendous success in recruiting (which is highly competitive) and in producing graduates who see themselves first and foremost as doctors for children. Unfortunately, the complex structure and financing of triple board programs has limited their spread; currently only 21 triple board training spots are offered each year.

In their paper, "Straight on Through: The Current State of Child Tracks in Psychiatry Residency," Sengupta et al. [12] describe the growth of 5-year tracks for general psychiatry and CAP training, another innovation to "capture" interested medical students in year 4 of medical school and then provide them with enhanced CAP experiences during psychiatry residency to maintain their commitment to CAP. These programs are distinguished from the usual fast track process in that all 5 years of training occur at a single institution, and no application process for CAP fellowship is required. Some of these tracks have their own NRMP number, but many involve primarily an increased number of CAP rotations and access to CAP mentors during postgraduate years 1–3, followed by a 2-year CAP fellowship. The authors argue that the most important benefit of a child track is to promote the trainees'

professional development. Because child track residents specialize earlier in training, they can connect to appropriate mentors, engage meaningfully in professional communities locally and nationally earlier, and be involved in more longitudinal scholarly and clinical activities. On the practical side, child track trainees avoid financial and other burdens of applying to and interviewing for a fellowship. "Having a 5-year program can help trainees accomplish more and settle in to personal and professional aspects of their development in a way that is more challenging in two separate training programs" [12]. One wonders if the mentorship and sense of community fostered by these 5-year tracks also protect against the burnout associated with CAP work and if they are critical elements in preventing attrition.

As a counterpoint, Simmons et al. [13] describe in their commentary, "Preparing Child and Adolescent Psychiatrists for the Future of Our Field: In Defense of 'Slow Tracking,'" that 5 years of training cannot provide the development of psychotherapy and leadership skills that can be accomplished by completing the full 4 years of general psychiatry training followed by a 2-year CAP fellowship.

Role of General Psychiatrists and Primary Care Physicians in Treating Children and Adolescents with Mental Illness

In addition to exploring 4-year programs that lead to board certification in both adult psychiatry and CAP, one of us (AB) suggests an alternative. We could substantially strengthen the child training requirements in general psychiatry programs in order to have all graduates from psychiatry programs be competent to treat common, uncomplicated presentations in children and adolescents. This approach would be analogous to the current expectation that all general psychiatry graduates are able to treat common, uncomplicated geriatric psychiatry disorders (with complex or treatment-resistant cases remaining the domain of board-certified geriatric psychiatrists). This model has the potential to have a much bigger impact on the available workforce to treat children. It is also consistent with the growing appreciation that the serious mental illnesses of adulthood are likely to have roots and developmental trajectories that extend through much of childhood and adolescence. Parallel to increasing competence among general psychiatrists is action to increase competence among pediatricians and family doctors. Psychiatry educators can affect the training of primary care doctors by making experience in integrated care a required training experience in CAP fellowships; one of the biggest force multipliers of integrated care programs is that they allow CAP fellows and practicing CAP physicians to help primary care pediatricians and family doctors acquire skills in treating mental health disorders on their own.

Conclusion

The current workforce shortage in CAP is so severe that an "all of the above" approach is likely needed. CAP physicians will need training via all the pathways discussed in this collection: the traditional 6-year pathway, all the 5-year pathways (fast track, combined, and triple board), and perhaps the 4-year accelerated training pilot. Even with all these training paths to board certification, CAP physicians will need help from their colleagues, especially primary care and general psychiatry physicians, to treat children and adolescents with less severe mental illness. Medical educators also should consider how to prepare all physicians working with mentally ill children and adolescents to have the emotional stamina to do this work.

Ultimately, the job of psychiatry educators is not to make recruitment easier for CAP fellowship programs, or even to relieve the workforce shortage; psychiatry educators' job is to make sure that the children and adolescents who need quality psychiatric care can get it. Success will be measured not in the NRMP Match fill rates of CAP fellowship programs, but in the children and adolescents who had the burden of mental illness lifted from them and whose suicides were prevented through the care of faculty, residents, and graduates.

Declarations

Disclosures Erica Shoemaker is the co-chair of the Training and Education Committee of AACAP. She is a member of the Taskforce on the Crisis in Recruitment of AACAP. Adam Brenner has no conflicts to disclose.

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