

Adolescent Medicine Fellowship

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Jodi Brady-Olympia and Jennifer Shook



J. Brady-Olympia $(\boxtimes) \cdot$ J. Shook Division of Adolescent Medicine, Department of Pediatrics, Penn State Children's Hospital, Hershey, PA, USA

e-mail: jbradyolympia@pennstatehealth.psu.edu; jshook1@pennstatehealth.psu.edu

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What Is Adolescence?

Age 10 years to early 20s is commonly referred to as "adolescence." It is not a strictly defined period, but rather a gradual transition from childhood into adulthood. Over this transition, we expect maturation not only physically but also socially and emotionally [1]. At the start of this transition period, we have young children, often concrete in their thinking and heavily dependent on the adults in their lives. At the conclusion of the transition, we expect to have a self-sufficient young adult, able to think and reason abstractly and independently. It is the goal of those caring for adolescents to help facilitate this process and help our patients to navigate this journey successfully.

The History of Adolescent Medicine

The beginnings of comprehensive healthcare for adolescents in the United States can be traced back to the time period just following World War II. Around that time universities began to consider what their role was in providing healthcare for their students [2]. During this period of time, there also arose an interest in studying the normal growth and development as well as mental health of adolescents. In 1941, the American Academy of Pediatrics held a symposium on adolescents during which some of these studies were presented [3]. In the years that followed, the field of Pediatrics, with some contribution from Internal Medicine, began to take on responsibility for improving healthcare available to adolescents [3]. In 1951, Dr. James Roswell Gallagher started the first subspecialty service dedicated to the care of adolescents [2]. In 1952, an Adolescent Unit was launched at the Children's Hospital in Boston, which was a significant development as it highlighted the importance of healthcare dedicated to adolescents [3].

The Society for Adolescent Health and Medicine (SAHM) was founded in 1967 [4]. It was born out of a series of seminars held at the Children's Hospital in Washington, D.C., where the goal was to educate physicians caring for adolescents [3]. Even from

the beginning, the importance of multidisciplinary care was recognized with teams of providers including psychologists, nutritionists, social workers, and nurses, in addition to other disciplines [2]. This recognition of the importance of multidisciplinary collaborations in the field of adolescent medicine is apparent even today. The Leaders in Adolescent Health (LEAH) program is a multidisciplinary training program with the goal of mentoring and developing leaders in adolescent health [5]. Funding of the LEAH program by the US Department of Health and Human Services Maternal and Child Health Bureau began in 1977 [5].

Adolescent medicine is recognized as a subspecialty by the American Board of Pediatrics, American Board of Internal Medicine, and the American Board of Family Medicine. The first certifying exam was administered jointly by the American Board of Pediatrics and the American Board of Internal Medicine in 1994 [6]. Both the American Board of Internal Medicine and American Board of Family Medicine require a 2-year training program. The American Board of Pediatrics requires fellows to complete a 3-year program which entails additional time for scholarly activity [7]. The Society for Adolescent Health and Medicine lists 30 adolescent medicine fellowship training programs beginning training in July 2021 (www.Adolescenthealth.org).

What Makes the Subspeciality of Adolescent Medicine Unique from General Pediatrics?

While most general pediatricians care for adolescents in their practice, adolescent medicine specialists receive additional training and experience in areas such as adolescent gynecology, eating disorders, substance use, gender diverse care, and mood disorders. They also often work as part of a multidisciplinary team in caring for adolescents with complex psychosocial concerns in addition to complex medical challenges. In addition, many adolescent medicine specialists practice in academic settings where they are also involved in research and education of medical students, residents, and fellowship trainees.

What Skills or Qualities Are Necessary to Work with Adolescents?

In order to establish rapport with adolescents and effectively communicate with them, there are several skills that are essential. One must understand the transition that takes place in the journey from childhood into adulthood and the developmental steps along that path; thus, a sound knowledge of normal growth and development is crucial. We need to understand how the adolescent is growing and changing through this transitional period both to effectively communicate with them and recognize concerning deviations from what is expected. It is necessary to show the adolescent respect and acknowledge their increasing autonomy as they are entrusted with the responsibility of caring for their own health and overall well-being. On the other hand, it is also important to involve the adolescent's family or other personal or professional supports in their lives. In addition, it is crucial to effectively establish rapport, gaining the adolescent's trust in a professional, nonjudgmental manner. While adolescents may give us answers to our questions, they will be unlikely to discuss deeper concerns, questions, and fears if they do not feel they can trust their healthcare provider. While we are working to gain their trust and establish rapport, it is also important to discuss confidentiality and its limitations as well as make sure that appropriate boundaries are set at the onset of the encounter. This will help create a safe environment for both the adolescent and the provider [1].

Establishing rapport and developing trust are particularly important when working with adolescents when we consider the leading causes of morbidity and mortality. Unintentional injuries, suicide, and homicide continue to be the leading causes of mortality in this age group, and behavioral, social, and environmental factors contribute largely to these leading causes of morbidity and mortality [2]. As a result, the importance of creating a safe environment where they can honestly share their emotions and risk-taking behaviors cannot be overstated. In order to guide them and know what resources they need, it is crucial to understand their emotions and behaviors.

Why Choose a Career in Adolescent Medicine? The Opportunities Are Vast

- 1. Adolescent medicine physicians play an important role in guiding their patients as they transition from childhood into adulthood. They work with other healthcare providers to educate adolescents to take an active role in their own healthcare. As they leave the childhood period where they relied on their parents to make medical decisions, it is our role to partner with them as they learn to ask questions and take on responsibility to make their own medical decisions. With this, it is also important that they gain the skills necessary to advocate for themselves and their needs. They need to learn how the decisions they are making both in the office setting and in their lives can impact their present and future health.
- 2. Adolescent medicine physicians are able to counsel and provide guidance and accurate information about many sensitive or high-risk topics. As they build rapport with the adolescents, adolescents learn that their medical provider is a trustworthy source of accurate medical information and resources in the community.
- 3. Adolescent medicine physicians enjoy the challenge of providing medical care to adolescents with complex medical and psychosocial needs.
- 4. Adolescent medicine physicians work as part of an interdisciplinary team.
- 5. Adolescent medicine physicians may work in school-based health clinics. These clinics can be found in a variety of settings such as colleges or universities, boarding schools, or inner-city schools. In this setting, adolescent medicine physicians may also be involved in sports medicine clinics or act as a team physician.
- 6. There are numerous opportunities to participate in research to advance the field of adolescent healthcare both in the United States and around the world.
- 7. There are numerous opportunities to participate in global medicine. Adolescents make up a large percentage of the population around the world and play a key role in the political,

- social, and financial milieu of a country, yet there is a shortage of resources and providers with expertise in caring for this population, particularly in underdeveloped countries around the world [8].
- 8. Adolescent medicine provides an opportunity to advocate for social and political issues which directly impact the adolescents for whom we provide care.
- 9. Adolescent medicine provides an opportunity to educate future physicians and healthcare providers.

Fellowship Training in Adolescent Medicine

Completing a fellowship in adolescent medicine is a great way to further your training in the comprehensive care of adolescent patients. The core knowledge domains expected to be covered in fellowship include preventive and general adolescent care; safety, injury, and violence; sexuality and gender; reproductive health; mental and behavioral health: substance-related issues and addictive disorders; nutrition and disordered eating; musculoskeletal health and sports medicine; endocrinology; sexually transmitted infections; ethics, legal issues, and health equity; core knowledge in scholarly activities; and general knowledge domains (i.e., the various organ systems and illnesses found in adolescent-aged patients) [9]. Adolescent medicine is a 3-year fellowship program and takes applicants that have or will have completed pediatrics, internal medicine, combined internal medicine-pediatrics, or family medicine residencies. Internal medicine and family medicine candidates may have the option to complete a 2-year rather than 3-year program and should discuss that with the programs in which they are interested.

While all fellowship programs provide training in each of the areas of the core curriculum, programs may vary in terms of what they are best known for or in which areas they provide the most exposure. For example, some programs may see many patients with teenage pregnancy and gynecological concerns, while others

may see a large number of patients with eating disorders. Every program is slightly different, especially depending on the geographic location. If you have a strong interest in a particular topic, it is important to learn if the programs you are interested in will give you the exposure and training you desire in order to accomplish your academic goals.

Another great aspect about adolescent medicine is that it is often experienced directly in various sites outside of the hospital or medical office in order to meet and treat adolescent patients in their own communities. Some fellowship programs will provide opportunities to work at places such as schoolbased health centers, college student healthcare centers, other high schools or middle schools in the community, group homes, and juvenile justice centers. There are also different balances of outpatient versus inpatient responsibilities in each program. While adolescent medicine is largely outpatient, at some programs, adolescent physicians act as hospitalists, caring for adolescent patients that are admitted for common general medical complaints (e.g., asthma, pneumonia, and cellulitis); some programs will have an adolescent medicine inpatient admitting service for diagnosis such as pelvic inflammatory disease, abnormal uterine bleeding, or malnutrition, and some will be a consult service for similar diagnosis. It is important to choose a program where you will be satisfied with the breakdown of outpatient and inpatient roles.

When applying for adolescent medicine fellowship, just like any other residency or fellowship, location is important. You may have more time outside of the hospital than in residency, so it's helpful to be somewhere where you will be happy. However, applying broadly (if you are not geographically limited by family or other reasons) can be very helpful to give you the best chance at matching. Unlike residency, many fellowship programs only take one fellow per year (a few take two or three), so locking yourself into one geographic area or city may be more competitive, while there are many excellent programs you may love in places you might not otherwise have thought to apply. Thus, try-

ing out a new city or state for 2 to 3 years may also allow you to explore a new place and meet new people. Receiving medical training in different regions is also a great way to learn how things may be done differently at different hospitals.

During the adolescent medicine fellowship, fellows are required to complete a scholarly activity project over the course of the period of training. Fellows will work with their fellowship program director as well as a research mentor to establish and carry out a project. Fellows are given designated protected time to work on their scholarly projects. Examples of projects that would satisfy the requirement may include a peer-reviewed publication, an in-depth manuscript, a thesis or dissertation written while completing an advanced degree, an extramural grant application, or progress reports for projects of exceptional complexity, such as a multi-year clinical trial [10, 11].

Some programs allow fellows the opportunity to obtain a Master's degree while completing fellowship. These might be a Masters of Public Health, Masters of Science, or Masters of Education, for example. You may also receive partial or full funding from your program in order to enroll and complete this degree, so this would be important to ask about if it is something you are interested in doing.

Another aspect of some programs that would be unique is if the program is designated as a Leadership in Education and Adolescent Health (LEAH) program. LEAH programs work to provide opportunities for professionals of multiple health disciplines to learn to be leaders in clinical care, research, public health policy, and advocacy in the relation to the healthcare of adolescents [12]. Regardless of LEAH designation, most programs will allow fellows many opportunities to work closely with social workers, psychologists, dietitians, and various other healthcare disciplines.



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