### Summer 2021

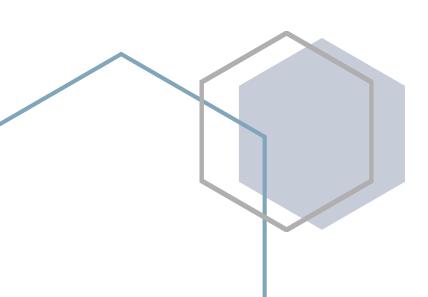
# **The Perspective**

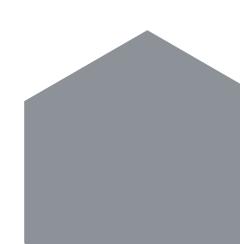
A quarterly newsletter published by the National Med-Peds Residents' Association in collaboration with the Med-Peds Program Directors Association & the AAP Section on Med-Peds

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# 2021-2022 Executive Board



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# **President's Welcome**

To my Med-Peds family,

It is hard to believe that we're already two months into a brand-new academic year! As I look back and reflect on my time as a Med-Peds resident over the past three years of training, I find myself getting nostalgic not only about my own growth, both personally and professionally, but also about all the wonderful experiences I have been able to share within the Med-Peds community. I have grown close to the co-residents in my own program and others around the country, learned to care for a diverse patient population across the life spectrum, and have been honored to serve you and your career interests on the national level through NMPRA leadership. Moreover, I have found myself, time and again, utterly amazed by the resilience, compassion, selflessness, and commitment I have seen reflected in the faculty, residents, and students of our community. Especially now, amidst the conflict and grief ever-present in our world and in our daily lives, I have never been prouder to be a member of such a supportive and collaborative group of people whose collective life-passion is to better the world by giving of themselves to others. No matter the varied interests or unique career paths that one may find in Med-Peds, I have come to realize that our specialty is just that: special, in every sense of the word.

Inspired by this diversity and strength of our community, I am pleased to announce that our 54<sup>th</sup> annual National Conference will be centered around the theme "Let's Talk Transition Care!" Given the unique ability of our specialty to care for patients--including those with complex medical needs--throughout a lifetime, we plan to focus the conference's lectures, case presentations, and breakout sessions on the many ways in which Med-Peds training can help bridge the gaps between childhood, adolescence, and adulthood. Our speakers will highlight the ingenuity and passion with which they have learned to navigate the journey from pediatric to adult-centered healthcare and how Med-Peds clinicians are especially well-positioned to help facilitate that navigation. Presented at this conference will also be the past and future winners of our annual Grants and Awards.

While our initial hope had been to gather in person in Philadelphia, PA alongside the National AAP Conference this fall, due to the current state of the COVID-19 pandemic, we will likely pursue an exclusively virtual format again this year to ensure the safety of our members and the patients we serve. More specific conference information and registration details will be sent out soon via the organizational listserv.

This year, we are also very excited to introduce to you our new Diversity, Equity, and Inclusion (DEI) Subcommittee headed by our director, Dr. Adrianna Stanley. Created to promote visibility, recruitment, and mentorship within our Med-Peds community, the new committee has many exciting things planned for the year ahead. Members are working on developing virtual community building events, creating opportunities for professional networking, expanding mentor-mentee connections between faculty and residents, and partnering with other national affinity groups like the Student National Medical Association (SNMA) and the Latino Medical Student Association (LMSA) to promote DEI efforts throughout the medical field. Information

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regarding opportunities to become involved will be distributed through our listserv and listed under the "DEI Corner" on our beautiful, newly updated website at <u>www.medpeds.org</u>.

Despite the persistent uncertainty of the weeks and months ahead, one certainty that prevails is the continued strength and vibrancy of the Med-Peds community. I am truly honored to serve this organization, and I look forward to seeing all the ways in which you, our members, will continue changing our field and the lives of our patients for the better.

Yours in Med-Peds,

Sophia Urban NMPRA President 2021-2022 <u>president@medpeds.org</u> Internal Medicine/Pediatrics PGY-4 Medical University of South Carolina . . .

# A Message From MPPDA

For Dani Rojas, a beloved character from the show "Ted Lasso," Fùtbol is life. For me, Med/Peds is life. I cannot over-emphasize the welcoming and supportive nature of the greater Med-Peds community. Having been an Associate Program Director/ Program Director for the past 25 years, I have been privileged to be a part of this large, very functional extended family. Early in my career I bonded with my co-residents over this unique shared experience. When I was a young Associate Program Director and new mother, our residents and faculty truly became family. When I attended my first Med/Peds Program Directors Association (MPPDA) national meeting, an entire world opened up with endless inspiration and support for innovation, faculty development, collaboration, and maybe even a little karaoke thrown in for good measure. Over the years, as an organization, we collectively experienced and managed successes, challenges, joy and pain, supporting each other along the way.

Since our inception in the 1960's Med/Peds has taken an active role advocating for our patients, physicians and learners. Recently, the various Med/Peds organizations have led efforts in anti-racist advocacy, promoting resident wellness, and in mentoring medical students.

On a personal level, my local and national Med/Peds family has provided me with support and encouragement so that I can care for my husband after his living donor liver transplant. I truly appreciate the many messages I have received from medical students, residents, fellow and faculty colleagues from around the country as well as coffee and food on the fly during long hospital stays, coverage for my local clinical and administrative duties, and support and coverage for my role as Med/Peds Program Directors Association (MPPDA) President.

The MPPDA had our national meeting this past March (virtually) in conjunction with the Association of Pediatric Program Directors. Our welcome featured a tremendous address given by Dr. Princess Dennar (new D, E, &I advisor to our executive committee). Dr. Camila Mateo (Faculty Advisor, Office of Recruitment and Multicultural Affairs at Boston Children's Hospital Boston Medical Center) presented our plenary, "Addressing Bias and Reducing Discrimination: The Professional Responsibility of Health Care Providers." This wonderful talk was followed by breakout rooms (creating and revising anti-racist curricula, supporting diverse trainees, and intentional recruitment of diverse residents). We had our first MPPDA-led session for rising Med/Peds chief residents and as always, NMPRA presented a fabulous update for our membership.

MPPDA continues to work with SNMA (Student National Medical Association) and LMSA (Latino Medical Student Association) to improve student advising, advocacy, and mentorship on local, regional, and national fronts. Hopefully many of you have already experienced virtual outreach as part of our ongoing recruitment series. We continue to support Med/Peds residency programs and residents through regional meetings, regulatory advocacy, and connecting and collaborating with internal medicine and pediatric organizations. Med/Peds has a valuable and unique perspective and identity, and it is critically important that we make our voices and opinions heard as change is discussed. We look forward to continuing our strong partnership with NMPRA. Med/Peds is life!

Rita Rossi-Foulkes, MD, FAAP, MS, FACP President, MPPDA University of Chicago Internal Medicine-Pediatrics Residency

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# A Message From AAP-SOMP



Welcome! It is the start of the new academic year.

With the start of this new academic year, I want to pass along some information that occurred at the recent AAP Leadership meeting.

Well-being was a big topic, especially considering COVID. The Section on Med-Peds Physician Wellness Booth, in collaboration with the Section of Integrative Medicine, was mentioned prior to one of the plenary sessions for the outstanding work that we do during

the National conference as well as on the Med-Peds section collaboration site.

I want to highlight the inspirational article – "We Burn Out, We Break, We Die: Medical Schools Must Change Their Culture to Preserve Medical Student Mental Health" published in May 2021 Academic Medicine. The article is a poignant view of the need to address self-care and the challenges that medial students face that lead to burnout, depression, and suicide. In addition, there is aspirational work that the Section on Pediatric Trainees is doing to address burnout and promote well-being.

The top eleven resolutions voted on by the AAP leadership from State Chapters, Sections, and Councils have been referred to experts in the Academy for review and to be potentially acted upon by the AAP Board of Directors and staff. Many of the resolutions addressed diversity, inclusivity, and structural racism, mental health, firearm prevention, literacy, and pain management. Refer to the August 8 AAP News for the full list of the top 11 resolutions.

This upcoming year will be busy for Med-Peds as we work with the AAP on some of the resolutions that align with our strategic planning. I am reaching out to residents and Med-Peds clinicians to help the Section work towards educational webinars. Some that we specifically discussed included immunizations and preventative care guidelines, well-being and resilience, diabetes, and hypertension just to name a few.

Finally, the AAP National Conference is in October. Registration for NCE is open and you will be able to register for Live only, Virtual only, or both; see <u>https://aapexperience.org/</u>. The Wellness Booth and part of the Med-Peds programming will be live; I hope to see you there in Philadelphia.

The Section on Med-Peds is here for you. Please feel free to reach out with any topics, suggestions, or concerns.

Stay safe.

Jayne

Jayne Barr MD MPH Chair, AAP Section on Med-Peds

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### VH1223 Joint Program: Section on Osteopathic Pediatricians, Section on Integrative Medicine, and Section on Medicine-Pediatrics

Advancing the Clinician's Toolbox: Integrative, Osteopathic, and Advocative Approaches to Pediatric Care and Drug Use

Saturday, October 9 9:00AM – 11:30AM EDT – Live, VIRTUAL

With increasing utilization of integrative therapies by children and recent robust evidence to support these therapies, physicians need a well-rounded introduction and overview of integrative and osteopathic approaches in pediatrics. This program will discuss these therapies as well as legal implications, advocacy, and policy development related to cannabis and vaping.

9:00AM	Welcome and Introductions		
	Moderator: Kristin Wong, MD, FAAP		
9:05AM	Osteopathic Manipulation		
	Tyree Winters, DO, FAAP		
9:35AM	Focus on Autism: Integrative and Osteopathic Approaches and Research		
	Robert Hendren, DO		
10:05AM	Marijuana Use in Children and Adults		
	Deepa Camenga, MD, MHS, FAAP		
10:35AM	Vaping: Advocacy and Policy		
	Jennifer Chuang, MD, MS, FAAP		
11:05AM	Q&A		
11:30AM	Adjourn		
	All programs will be recorded and available through January 31, 2021.		

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Monday, October 11 2:00PM – 3:15PM EDT – Live, In Philadelphia

This program will familiarize pediatric health care providers with evidence-based integrative and complementary approaches and osteopathic modalities to treat anxiety and depression in adolescents.

2:00PM	Welcome/Introduction		
	Moderator: Anna Esparham, MD, FAAP		
2:15PM	Integrative Approaches to Anxiety/Depression in Adolescents		
	Larry Rosen, MD, FAAP		
3:00PM	Q&A		
	Larry Rosen, MD, FAAP		
3:15PM	Adjourn		
	All programs will be recorded and available through January 31, 2021.		

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American Academy of Pediatrics



### SECTION ON MED-PEDS AND THE SECTION ON INTEGRATIVE MEDICINE

Invites you to stop by the AAP National Conference for the

# Physician Health & Wellness Booth

### **HOURS OF PROGRAM:**

- Saturday, October 9 noon-4pm
- Sunday, October 10 10am-4pm
- Monday, October 11 10am-2pm

### LOCATION:

### Pennsylvania Convention Center, Halls C-E (AAP Resource Center)

This program is designed to give individual information and education to physicians about their own adult health. We will provide information about adult immunizations, cancer screening, cardiovascular disease, menopause, vitamins, diet, exercise, stress, and burnout so that attendees can better understand what they can do to become healthier. Come by for your free one-on-one consultation!

Doctors who take care of themselves are better role models for their patients, experience less stress and burnout and live longer...so make sure to stop by!

# **Classifieds**

### Introducing the new Med-Peds Academic Channel (MPAC)!!



- Forum created to promote scientific advancement and dissemination of knowledge in the field of Med-Peds
- Peer-reviewed publications on various topics unique to the practice of Med-Peds
- Open to submissions including original articles, review articles, case reports, technical reports, editorials, and posters!!

Check out more details on the website:

https://www.cureus.com/channels/med-peds

\*\*Please submit under "academic channels" to submit to MPAC rather than to cureus.com\*\*

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# **Spotlight On**

### Med-Peds DEI teams at the University of Michigan and University of Rochester

Submission by Blair Lenhan, PGY-4 at the Combined Internal Medicine – Pediatrics Residency Program at the University of Michigan in Ann Arbor



In May, they set up a joint meeting between our programs. The session was set up by Cat McDermott (UM), Elizabeth Scruggs (UM), Georgia Farrell (Rochester), and Guylda Richard Johnson (Rochester). The session was part of a collaborative project "to explore issues related to diversity, equity and inclusion and trials and triumphs we have experienced in these domains as med-peds residents." The first session focused on the demographics of both our communities, areas where we as residents have experienced and witnessed racism, and our institutions' response to the national acts of racism that have been highly publicized over the last several years. It was great to work with another residency and build these relationships. A second session is planned for the end of this summer. • • •

### Brown University Med-Peds Residency Program Initiative

Submission by Maddie Ward, PGY-2 and Kelsey Kolbe, 4<sup>th</sup> year medical student

### **Title:** Brown University Med-Peds Residency Program Initiative **Authors:** Maddie Ward, MD, IM-Peds PGY2; Kelsey Kolbe, 4<sup>th</sup> year medical student

The Brown Med-Peds Residency program is piloting a novel arts-based curriculum to improve resident communication skills, supported by Program Director Dr. Suzanne McLaughlin. The inherent subjectivity, ambiguity, and complexity of art offers an opportunity to engage med-peds residents on the nuances of effective communication and interpersonal connection.



Image Credit: RISD Dept of Theory and History of Art and Design

Our initiative--which we're calling Art Relay--consists of six sessions that will take place from August 2021 to June 2022. To develop sessions, we have collaborated with community partners including the Rhode Island School of Design, the National Gallery of Art, a local improvisation troupe, and experts on arts in medicine within our health system. In the first few sessions, students will focus on discovering the basic components of effective communication and reflect on their own ability to communicate through visual arts-based activities. Residents will then learn how to communicate effectively through use of drawing and written language. During the final sessions, residents will learn to apply their communication skills through medical improvisation.







Image Credit: Maddie Ward at the National Gallery of Art

We are excited to see how this initiative impacts residents and their communication skills. We plan to collect feedback about the program through evaluations and a post-program focus group. We are hoping to publish the specifics of our approach and survey/focus group data in the coming months.

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# **Topics in Med-Peds**

The Case for Government Expansion of Telehealth Broadband Internet Access

Charles Foust, MS4

Kansas City University of Medicine and Biosciences

The Covid-19 Pandemic has highlighted the utility of telehealth for the United States. Patients remaining at home due to shutdowns or adhering to mandatory guarantine periods are able to access their providers and receive healthcare for chronic or acute issues that otherwise would have been delayed. CDC data showed in the first guarter of 2020 a 50% increase in the number of telehealth visits from the same period in 2019.(1) Patients reported high satisfaction with this new delivery of healthcare(2). This large increase can be attributed in part to the removal of restrictions and changes in policies due to the pandemic. The CARES Act included several significant policy changes which increased telehealth accessibility. Medicare compensation was increased to be equal to that of an office visit. A patient's ability to obtain consent for telehealth services was expanded and Physicians can provide telehealth services from their homes. Expanded access and privileges to use telehealth was given to social workers, physical therapists and others. Various restrictions such as in-person visit requirements were relaxed and the approved list of specific video software or devices was expanded. (3) While this relaxing of restrictions and encouraging findings of increased usage and patient satisfaction encourages telehealth as a viable way providers may take care of patients, it is important to note that overall access across the US is uneven. Lack of internet infrastructure in many rural areas, and state restrictions on telehealth remaining even after federal mandates, contribute to lack of uniform access to telehealth services. Therefore, it is important for local, state, and federal government to invest in the infrastructure required to expand telehealth to rural areas to provide better access to medical care and a better quality to life.

The technical requirements for telemedicine can be daunting. Telehealth generally requires access to broadband internet and technical support staff, imaging technology such as webcams or digital stethoscopes, and staff training. (4) Broadband internet in particular is a considerable obstacle to the implementation of telehealth. The FCC reports in the 2018 Broadband Progress Report that 24 million Americans lack access to fixed broadband speeds of 25 Mbps/3 Mbps, the current speed benchmark. In rural areas 30.7% of Americans and 35.6% of Americans living in Tribal lands lack access to this benchmark speed, compared to only 2.1% of Americans living in urban areas. (5) Unfortunately, installing broadband is incredibly expensive. Lines have to be placed underground and physically run to houses which takes significant time and effort. In rural areas, these issues of cost and labor are complicated due to a much smaller and more dispersed population, resulting in significant per-person costs. The Rural Broadband Association in a review of rural broadband economics found that there were three options for covering this increased cost. Higher consumer prices, services not offered, or costs offset by government subsidizes. As higher prices are not desirable, especially due to the lower income typically found in rural areas, and not offering the service provides no solution, government subsidies are the only possible way to bring broadband and telemedicine to rural areas. This idea is not without precedent. Roads, electricity, and communications such as phone lines are all available in rural areas due to subsidies given by local, state, and federal governments.(6)

The obstacles to telehealth do not end with infrastructure. There is a significant burden placed on the provider as well. Providers are required to possess a license in the state in which they will practice, and this still applies to telehealth crossing states lines, even if the provider never leaves their home state. If a telehealth clinic operated on the western border of Missouri, the provider would be required to have

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a license to practice in Arkansas, Oklahoma, and Kansas for cross-border patients. This is a significant burden of time and finances to the provider and can discourage them from practicing telehealth. Interstate licensure is yet another example of the obstacles to telehealth that can only be overcome with the cooperation of state governments. While approval for a "universal medical license" would likely face a strong challenge by many states, and an overarching federal law would undoubtedly result in legal challenges, numerous interstate agreements between states that border one another, or regional licensure could provide an adequate compromise.

While the obstacles may seem substantial, the advantages of telehealth for the country's health make it a worthwhile government investment. The most obvious advantage is that telehealth eliminates one of the largest barriers for rural areas to receive medical care, distance to a provider. With the looming physician shortage in the US(7), the distance to care in rural areas is a problem that will only get worse. Without telehealth there are two ways around this. Either increase the number of physicians, or have patients travel the distance. Both have issues. As stated before, increasing the number of physicians could be increased, the smaller and spread-out populations of rural America would likely be insufficient to support the multiple practices required to ensure easy physician access to a rural population. Having patients shoulder the distance may also discourage patients from receiving care, as the time commitment and travel costs are potentially significant. Telehealth eliminates these two obstacles. With adequate broadband connectivity, one provider could provide for a vast patient population with healthcare that was previously impossible to achieve. Not only could primary care be provided, but access to specialists, dieticians, addiction counselors, and countless others could be suddenly available to patients at the tap of a button.

While the investment into broadband expansion is expensive, this could be offset by decreased healthcare costs. The US currently spends \$11,582 per person each year(8) and a report by *The Lancet Public Health* found that in 2016 27% of health care spending was due to preventable illnesses.(9) As of 2018, diabetes affects 10% of the US population, with a direct and indirect total cost in 2017 of \$327 billion.(10) In 2017-2018 the CDC reported the prevalence of obesity to be 42.4% and an estimated annual medical cost of \$147 billion.(11) The effects and costs of these diseases can be significantly decreased or even eliminated with more access to preventative medicine. Telehealth provides an easy way for patients to receive this preventative care that would otherwise be unavailable. In addition to the virtual visits with providers, the broadband infrastructure put in place to allow telehealth would give rural patients a much vaster archive of resources to assist them in combating their diseases. With the ability to look up nutritional information, informational resources on their disease, exercise regimens, the opportunities for an increased quality of life are endless and could significantly decrease the cost and burden of these and many other diseases to the entire healthcare system.

Implementing telehealth will also have additional non-medical benefits for rural communities and the country as a whole. The building of new broadband access, telemedicine IT support, and other infrastructure will bring jobs and growth to these areas. Access to new resources and entertainment could cause rural areas to be more attractive locations for people to move to, further expanding the economy. Faster and more reliable internet access will improve the education systems of these locations, offering students and teacher an improved education with more opportunities to continue on to college or trade school, further enhancing their communities. With the infrastructure to support them, businesses will be encouraged to build and expand to these areas, offering vital access to new areas of growth, opportunities and development.

Access to medicine is a significant issue in the United States. Rural areas often have even larger gaps in access due to their low populations, but also lack of infrastructure to facilitate solutions such as telehealth. While the initial investment may large, the medical, economic, and social benefits make it a worthwhile endeavor. Local, state, and federal organizations should aggressively work together to examine the new data on telehealth available from the COVID-19 pandemic and implement the

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infrastructure and other changes necessary to make telehealth a viable alternative for these underserved communities. This will lead to a healthier America, which will result in a stronger and more prosperous America.

### <u>References</u>

1: Trends in the Use of Telehealth During the Emergence of the COVID-19 Pandemic - United States, January–March 2020. (2020, October 30). Retrieved January 27, 2021, from https://www.cdc.gov/mmwr/volumes/69/wr/mm6943a3.htm#F2\_down

2: Ramaswamy, A., Yu, M., Drangsholt, S., Ng, E., Culligan, P., Schlegel, P., . . . Authors..., L. (2020, September 9). Patient Satisfaction With Telemedicine During the COVID-19 Pandemic: Retrospective Cohort Study. Retrieved January 27, 2021, from https://www.jmir.org/2020/9/e20786/

3: CARES Act: AMA COVID-19 pandemic telehealth fact sheet. (2020, April 27). Retrieved January 27, 2021, from <a href="https://www.ama-assn.org/delivering-care/public-health/cares-act-ama-covid-19-pandemic-telehealth-fact-sheet">https://www.ama-assn.org/delivering-care/public-health/cares-act-ama-covid-19-pandemic-telehealth-fact-sheet</a>

4: What are the technical infrastructure requirements of telehealth? (2019, September 10). Retrieved January 27, 2021, from <a href="https://www.healthit.gov/fag/what-are-technical-infrastructure-requirements-telehealth">https://www.healthit.gov/fag/what-are-technical-infrastructure-requirements-telehealth</a>

5: 2018 Broadband Deployment Report. (2018, February 05). Retrieved January 27, 2021, from <a href="https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report">https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report</a>

6: Parsons, S. G., & amp; Stegeman, J. (2018, July 11). Rural Broadband Economics: A Review of Rural Subsidies (Rep.). Retrieved from <a href="https://www.ntca.org/sites/default/files/documents/2018-07/CQA-RuralBroadbandEconomics-AReviewofRuralSubsidies\_FinalV07112018.pdf">https://www.ntca.org/sites/default/files/documents/2018-07/CQA-RuralBroadbandEconomics-AReviewofRuralSubsidies\_FinalV07112018.pdf</a>

7: New AAMC Report Confirms Growing Physician Shortage. (2020, June 26). Retrieved January 27, 2021, from <a href="https://www.aamc.org/news-insights/press-releases/new-aamc-report-confirms-growing-physician-shortage">https://www.aamc.org/news-insights/press-releases/new-aamc-report-confirms-growing-physician-shortage</a>

8: Historical. (n.d.). Retrieved from <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical#:~:text=U.S.%20health%20care%20spending %20grew.spending%20accounted%20for%2017.7%20percent.</u>

9: Galea, S., & amp; Maani, N. (2020, October). The cost of preventable disease in the USA. Retrieved from <a href="https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30204-8/fulltext">https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30204-8/fulltext</a>

10: Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2020. Atlanta, GA: Centersfor Disease Control and Prevention, U.S. Dept of Health and Human Services; 2020.

11: Adult Obesity Facts. (2020, June 29). Retrieved January 27, 2021, from <a href="https://www.cdc.gov/obesity/data/adult.html">https://www.cdc.gov/obesity/data/adult.html</a>

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## Essays

### Making Space: Volunteering at the Children's Hospital

Jerome Watts, MS2 Howard University College of Medicine

"There will be times when you walk into a room and no one there is quite like you until the day you begin to share your stories [...] And all at once, in the room where no one else is quite like you, the world opens itself up a little wider to make some space for you."

- The Day You Begin by Jacqueline Woodson

It was my first day volunteering on the 4<sup>th</sup> floor of the children's hospital, and a big "Welcome!" hit me in the face as I passed through the doors of the unit. The warm greeting was continued with a big smile from a nurse who said excitedly, "I am so glad that you're here!"

Trying to keep the surprise from my face, I replied, "No problem, I am really looking forward to helping where I can."

"Great! Come with me," she exclaimed, leading me to a room where a patient, a boy about 8 years old, was lying in bed and watching TV. The boy didn't seem to be enjoying the show, nor the toys or half colored pages of a coloring book decorating the space around him.

"Hey!" the nurse caught the patient's attention. He looked over with a kind of, "what is it now," expression. That look soon melted away and his eyes lit up after seeing that she had brought someone for him to meet. It seemed as if he had been infected by the same big smile that the happy nurse greeted me with.

He yelled, "Hiiii!" like only a kid can do, as he slid his way off the bed to meet me at the doorway. I put my hand down for a low five and he met mine with a high one, only to then grab my hand and introduce me to all of his action figures and works of art. His favorite was a finger- painted bear covered with his favorite colors: blue, blue, and even more blue.

After meeting his toys and talking with him about superheroes and his favorite cars (the blue ones), it was time for him to eat and me to see who else could benefit from my time and company (as, being a volunteer, that was all I had to offer).

On my way out of the room, he yelled happily, "Bye, friend!"

I motioned to him to keep it down a little and whispered a much quieter, "See you later, little man!" The still happy nurse waved me over and repeated that she was so glad that I decided to volunteer. I once again said, "no problem," and went on to the next room.

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Later that day as I was leaving my shift, an older black woman came up to me and said, "I really appreciate you spending your weekend here and keeping my son busy and happy. He really needed it. There aren't that many people that look like you and him here or at his school... so thank you."

I responded, "It's really no problem at all! I am glad I was able to help." And then it clicked. I realized that Nurse Happy might have been so excited about my participation because of this same lack of representation of black men in the hospital. Thinking back to my time working and volunteering in hospitals, there were not many black men, let alone young black men, providing care as physicians, nurses, or volunteers. This realization helped me to understand that I could do more in my position as a volunteer than I had initially thought.

My new friend, whose favorite color was blue, was sitting in a room where there was no one quite like him. When someone who could begin to understand his story arrived, it looked and felt as if he found a space that was made just for him.

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A Close Encounter of the Human Side of Medicine

Harrison VanDolah, PGY-1

Internal Medicine-Pediatrics, University of Arizona College of Medicine – Phoenix

As I sat down on the plane, destined for the middle seat as I often am due to my late check-ins, I had my earphones in, shuffling through my usual inward air travel routine of reading saved news articles and building music playlists to soundtrack my next adventure. My knee-to-knee window-seat neighbor immediately let out a "how are you doing today?", and in a situation I'm sure many of you are familiar with, I begrudgingly responded with a "pretty good, how are you?", hoping for a quick exchange of pleasantries before moving back into my treasured airline inner zen state.

She bubbly responded with an "I'm almost perfect!", to which I couldn't help but jokingly reply "well, I'm perfect today". As she found a way to deliver an equally snarky response, I turned to look at her. She was an older woman with long gray hair highlighted by long streams of pink and blue, with laugh lines extending beyond the confines of her slightly asymmetrical purple mask. As a medical school graduate, I have had the value of observation ingrained in me over the years, and it was clear to me that she was — as she later also self-described — a "free spirit", unafraid of the judgmental eyes that might follow her around.

I also noticed a green see-through bag under the seat in front of her with at least a dozen pill bottles inside. Of course, my mind immediately started building her list of medical diagnoses based on the labels I could read. To my embarrassment, she caught my eye and said, "Yeah, you know you need these once you start growing old. Sometimes being old is hell - but hell, you're still alive!" Her humor and lighthearted nature drew me in, and before I knew it, we were deep in conversation.

She told me about her upbringing in Tucson, Arizona, riding horseback with her family rifle slung on her back into school each morning, and learning Spanish in a mostly Hispanic classroom. She spun tales about all the small towns and rural communities she had lived in throughout her life, from mountain towns in Idaho to the old mining communities in Arizona. She told me all about her latest "hooptie", an old minivan she bought for only 75 dollars that was in "perfect condition - other than it won't go reverse". She showed me pictures of her chihuahua, whom she likes to dress in "silly get-ups" like cowboy outfits and ballerina dresses.

She also reflected on her recent trip to Phoenix, sharing with me that she had lost touch with both of her children when they entered adulthood due to drug abuse, and recently had been able to reconnect with her daughter through social media, prompting her to take her remaining savings to purchase a flight to Phoenix to visit her. She beamed as she spoke of her daughter and all her passions as well as her struggles, obviously so proud of her despite the challenges she has had in her life.

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I found our conversation evoking stories and emotions from her that was evident she had not discussed in many years: her long relationship with a physically and emotionally abusive husband as he traveled the country as a musician, her months in a hospital following an intraabdominal gun shot wound she suffered as a bystander at a bar fight, the day she found out her adult son had died of a drug overdose. "Talking about my life - it sounds like fiction. But despite all this crazy stuff that has happened to me, I'm still in awe of the world around me."

As we approached the landing strip, we sat in our first shared silence in three hours as we looked out the window, watching the natural woods of Washington state begin to succumb to roads and houses in the approach to Seattle. I finally spoke up and thanked her for sharing her stories with me and for being such a good airplane conversation partner. Without turning from the window, she almost tearily said, "If you think I have a lot of crazy stories, how about all those people out there?"

As I prepare to set foot in the hospital with my newfound responsibilities as an intern, I have deeply reflected on this encounter and these parting words in particular. All these people that we see on our rounds and in our clinics are so much more than a heart failure exacerbation or a diabetes check-up. They are people just like C, carrying the weight of their lives and memories with them to every encounter alongside their medicine bags. I hope I can look up from the medicines in the bags and notice the laugh lines and pink hair looking back at me.

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### When The White Coat Comes Off

Meredith Kline, MS4 Emory University School of Medicine

"Look at my texts," she said, in a quivering voice. I opened the messages, and several coronal sections of a CT scan of a head popped up. Even as a budding third-year medical student, I noticed gross asymmetry and prominent opacification throughout — what should have been— the brain parenchyma. I was puzzled. She wanted answers, and I wanted context. The scan was clearly abnormal and neurologically devastating. What was the story behind this neurologically shattered brain? Or was this an anonymous brain on an MCAT practice question that she needed help with? My thoughts raced as I waited for my friend to catch her breath.

She broke the silence. "The doctors here say that if Bubbe is lucky enough to survive through the night, she will never be the same," she said of her beloved grandmother, whom I had met several times. "What do we do?" Her question, asked with a despairing voice and ardent urgency, prompted a lump in my throat.

A revered and cherished member of her community, Bubbe lived a deeply private life, after unthinkable trauma from surviving years in Auschwitz. She grew anxious as she aged, but hardly spoke of tragedies she endured as a young woman during the Holocaust, preferring instead to giggle with her grandchildren, whom she spoiled.

All in the same minute as the story unfolded through my friend's flustered words on the phone, I couldn't help but feel simultaneously honored, yet deeply uncomfortable. I was speechless that she had come to me in this intensely intimate moment for her and her family. But would Bubbe really want *me*, her granddaughter's friend, involved in her medical care? Or, would she want to peacefully live her final moments without further chaos and distress? I was 3,000 miles away, looking at images of the inside of her brain — a truly sacred space.

I spent hours on the phone with my distraught friend and her family, as they waited in the hospital, taking turns passing around the phone. Through tears, my friend's father described, "I went to fix her TV, and she just kept yelling and cursing at me about a headache."

"I guess I didn't realize what she meant when she said she had a headache, I thought it was just one of her anxious fits. Mom has always been crazy, but who can blame her after what she has been through," my friend's father continued. I listened and supported. I spent that evening on the phone explaining, to the best of my ability, the basic clinical science of Bubbe's brain. I conveyed hope for a miracle, but found it both a privilege and a responsibility to accurately portray what I understood to be the severity of the situation, and assist them in focusing on what Bubbe herself would have wanted. That next morning, her ventilator was withdrawn, and just a few hours later, Bubbe passed peacefully.

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Amid the sorrow and heartache that followed Bubbe's death throughout a broadcasted funeral and Shiva (traditional Jewish mourning period), I reflected on the fact that I had entered a profoundly personal moment in her life — not as her loved one, nor as part of any therapeutic alliance. I was called on solely because of my training and vocation, even as a complete novice. Knowing the confidential details of another individual's health and life, outside of a true, healing relationship, went against what I had learned in medical school about protecting patient privacy.

In medicine, we have a privilege to behold information that is not truly ours. Unsolicited access to personal health information contradicts the ethical principles we are taught didactically. Yet, I could not pinpoint why I still felt dignified in my involvement when my friend and her family were consumed with anguish and heartache. The paradox of simultaneous duty and privilege we hold with the knowledge, skills, and rapport we emanate as physicians enter our personal lives in ways we may not anticipate.

Just a few days after this intense experience, I went to a potluck dinner. While washing my hands in the bathroom sink, I noticed a pill bottle sitting beside the towel – with a large, bold label for sertraline. My thoughts spun - a bright, kind, and vibrant young woman, my friend had never mentioned or displayed any particular mental health concerns. With this one glance, I was struck with the same paradoxical uncertainty about where my role in caring for the health of others stops and where my role as a friend begins. I thought, again, about Bubbe's family, and how I was brought into a position that I was not sure that I should be in, whereas after learning of my friend's prescription, I struggled to figure out if I could, or should, invite myself in. I wanted to show support and openness without her feeling like her privacy had been violated.

Reflecting on the contrast between these two situations has catalyzed my keen awareness of the role of the physician when the white coat comes off. Based on ethical principles we are taught in medical school, it is not our prerogative to behold private information belonging to anyone except for our patients. However, when I suspect that a colleague is suffering from depression, or inadvertently discover that someone may be struggling after seeing their bottle of anti-depressant pills, is it then appropriate to speak up? There may be a higher threshold for protecting private health information when it involves mental health. Is it then acceptable to impudently point out a concerning pigmented spot on a friend's exposed back while at the beach?

Medicine, at its core, is rooted in humanism. There are clear ethical principles and formal laws to protect the privacy of patient information as part of the patient-physician privilege. Out of a formal setting, in our personal lives, individual judgement is what guides our actions. We rely on our instinctual goodness, cultivated through patient care, rather than ethical pillars. Outside of a therapeutic alliance, where is the line drawn between benign involvement in medical care, and stepping beyond boundaries, misusing our expertise? From my two eye-opening moments that prompted this complex question, I discern that delineation as invited versus uninvited. I imagine that this predicament only amplifies through training.

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I think about the number of times where I have seen people open up about personal information in unprecedented settings. I think about how, wearing my medical school sweatshirt on a flight once led to a two-hour emotional conversation with the parents of a baby born with DiGeorge syndrome, which they had never heard of before his birth. I think about a Thanksgiving Turkey Trot in my hometown where a neighbor approached me to share the status of his declining vision, and subsequent extreme consternation for his inevitable diagnosis of Macular Degeneration, which had afflicted and stripped his parents of their independence.

Increasing specialization in medicine complicates the role of the physician in their community. Where for example, questions that arise from a young couple experiencing infertility, may be considered beyond the domain of a psychiatrist, or managing medications for a child with a transplanted kidney may be beyond the scope of an ophthalmologist, the sense of compassion and humanism remains consistent. In Med-Peds, while caring for patients from birth, through life, and to a dignified death, there is complexity rooted in the fact that all ages and stages of the human condition, old and young, well and sick, acute and chronic, are within domain. This presents a recurring, unique conundrum for Med-Peds trained physicians who are armed with the power and gift of knowledge.

We are not entitled to anyone's private information except for our own. The reverence for medical training and physicians in our society, however, often confronts us with perplexing situations in which the lines are blurred, and we know too much to stay silent. Sometimes we are called upon by others to decipher medical complexities beyond just the jargon, as I was in Bubbe's story. While other times, these same traits of perceptiveness and inquisitiveness, which are so vital to flourishing as a physician, lead to our own personal uneasiness when we know too much, as I felt after noticing my friend's pill bottle. I strive to nurture the balance of becoming a trusted physician, as well as a supportive confidante, both in and out of the hospital. With deep care for the hard questions asked of me, and a resolved heart for serving my patients and personal community, I strive towards this balance with every nerve.

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### A Doctor's Touch

Zachary Christensen, MS4 University of Nebraska College of Medicine

The oncologist was a nice enough guy, but he never palpated her abdomen at followup appointments. That – his reliance on advanced imaging over the physical exam – was why he did not notice her tumor growing, explained my rural family medicine attending after spending numerous minutes pressing, marking, ad measuring that poor lady's stomach. It may have been my first clerkship, but I was pretty sure I understood enough about radiology to know his 67-year-old hands were not more accurate. I now realize his decades of experience had probably taught him that the line between diagnostic and therapeutic is often blurred.

Now that clerkships are behind me, I wish there had been more acknowledgment of the simple fact that gaining clinical experience can be incredibly frustrating. Now years into practice, most faculty view their training through rose-colored glasses, fondly remembering the third year as their first opportunity to make a difference in patient care. That is not my monthsold memory: instead, most days were simply one awkward moment after another. Some instances are benign and are merely the mandatory repetitions required to establish the basics, such as "this is how I stand and where I put my hands to listen to a heart." Others are more challenging, like *hearing* the heart. No one adequately warns these repetitions – fumbling over the most basic tasks of "doctoring" – are so uncomfortable, even demoralizing. Since no one ahead of us admits it, we certainly do not disclose it to our peers, and rarely even ourselves. But sometimes, in the quiet of the commute home, I would think back on the day and wonder if I will ever hear a murmur without prompting.

Professors regularly remind us that the only way to learn pathology is to auscultate hundreds of clear lung fields and read countless normal chest x-rays. After a few corrections, muscle memory ensures the stethoscope lands in four spots on the chest wall that roughly approximate Netter's colored ovals. Another ribcage and possibly enlarged cardiac shadow is systemically dissected: airway, breathing, circulation, diaphragm, effusions, fissures, gastric bubble, help! As the days and weeks pass, you add in relevant history, ask about provoking factors, and maybe even avoid re-Googling the obscure blood pressure medications cardiologists love. Bit by bit, you pull back another layer of the onion, and each time your resident or attending is posted like a sentry in front of the wealth of medical knowledge, ready to teach another pearl. It is easy to get lost in it all, like standing on a football field with yard lines but no numbers: you look back and see you have made progress, but are you standing on the three-yard line or the fifty? And along the entire length of the field are real patients, real diseases, real emotions. As medical students, we focus on the big picture, as measures of success revolve around identifying the proper diagnosis, selecting the correct test answer, or knowing the leading cause of common pathologies. But this high-level view obfuscates the marginal progress along the way; being a doctor is dozens of yards down the field, but there is value in each step in that direction, in each slightly-less-awkward patient encounter.

The pinnacle skill of a physician, the one that makes me most envious of my attendings, is the ability to deftly use one's hands to assess, diagnose, and reassure patients. From identifying hepatomegaly to evaluating the range of motion, they just *know*, and their hands just *do*. They eagerly call the student over to palpate while explaining the finding and the possible

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pathologies. I would be present, half-listening, half hoping that one day I will do the same. To counter this frustration and pessimism, I permitted myself to begin intentionally improving on the little things. When the elderly lady mentions her hands are bothering her, I do not have to conjure an extensive differential of Bouchard versus Hubbard, synovitis compared to dactylitis, or know how the knuckle should feel after decades of osteoarthritis. It is enough to simply take her hand, gently evaluate where it hurts most, and empathize. I always assumed adequate knowledge was a prerequisite for a thorough exam, but the foundation of it all might be the ability to respond to patient comments and complaints with a reassuring and confident touch. With time will come the internalization of mountains of medical knowledge, but it would be tragic to traverse that path without my humanity in tow.

Now I understand my family medicine attending was right: he knew his patient was getting worse in ways the oncologist was missing. Because for most patients, worse is not correlated with tumor size. The coldness of the CT table does not reveal the same information as the warmth of human touch. There is a vulnerability to "I am going to lift your shirt; let me know if I press on anything that hurts." That vulnerability opens a space for honesty, diagnosis, treatment: for the practice of medicine. How is your diet, your mood, your marriage? The radiologist does not include these factors in the report, and with their absence, you risk treating the disease but not the patient. The oncologist might have more accurately known the size of the tumor, but did he understand its weight on her life?

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Just Hair, or Something More?

Adrienne Johnson, MS4 Sidney Kimmel Medical College

How long does it take you to think about your hair every morning before work? Not, how long does it take you to style your hair every morning, but how long do you actively think about what your hair will look like. Five minutes? Ten, at most? I have spent days thinking about how I should wear my hair. You read that correctly, days. I'm not a perfectionist when it comes to hairstyles, nor am I talented enough to execute intricate designs that pop up on Instagram and Twitter. I spend days thinking about my hair because I know it carries weight and ultimately can determine how I as a person am perceived. Some of those reading this will instantly understand the feelings and reality surrounding something as simple as hair, and most of you probably guessed I am a person of color; more specifically, I am Black.

As a medical student, the first two years we are judged and ultimately graded on how well we absorb, reiterate, and apply information we have been taught. We have exams, guizzes, and fake patient scenarios. All objective data graded on a scale of 1-100. However, over the final two years we take all that medical information and are given the opportunity to practice in clerkships or rotations. We enter healthcare spaces and are now part of a treatment team. Something else also changes; how we receive grades. We rotate through core medical specialties our third year which are almost universally the same across all medical schools with minor exceptions. We spend time working with OB/GYN, Family Medicine, Internal Medicine, General Surgery, Pediatrics, Psychiatry, and Emergency Medicine teams. We meet new residents and attendings every day who tell us where to be, test our knowledge, and can influence our careers just from the interactions we have with them. They also have the power to determine what grades we ultimately receive based on how impressed they were with us, sometimes from one day together. Now this doesn't sound too terrible, right? Just be smart and you'll be fine. But it's not always about "being smart". It's no secret that these "objective" measurements can be intertwined with subjective biases. It's known that when a person is more similar to another, they are regarded more highly during interactions. So, what does that mean for people who are different? Their scores are lower, they are deemed less professional, they are more likely to be excluded or targeted. Me, a Black woman, walking through primarily Whitecis-male dominated spaces, am not in any way similar to the average resident or attending. So, what do I do? What is my option to fit in?

This is why I spend days thinking about how to wear my hair. I know that if there is a chance, I could make the person responsible for my grade uncomfortable. I mean there are state and federal laws being introduced against discrimination on the basis of hair so it's not like it isn't a reality for me and those who look like me. Hair, the dark, curly strands on my head that grow according to my DNA could make or break my academic standing. What if the scarf I wear to protect those strands is seen as unprofessional? It's not just hair, what if the way I sound or talk is too different, so I'm perceived as unintelligent? No amount of "smarts" will make up for the person I am perceived to be by others.

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### The Weight of a Journey

Joshua Mercer, MS4 Dell Medical School at the University of Texas at Austin

When I was growing up, I often found that the easiest way for me to express my thoughts and emotions was through the creation of fictional creative short stories. The following short story was inspired by the emotions I felt after hearing a patient retell their long and complicated medical history, and all the obstacles they had to overcome along the way. It plays off the notion that we, as medical providers, only receive a glimpse into the lives of our patients when they present to us in a healthcare environment. It touches on the beauty of being allowed to hear some aspects of a patient's life story and be a part of their journey, but also highlights the constrictions and limitations that the time-sensitive environment puts upon our ability to connect and develop meaningful relationships.

When I was a young man, I spent a few years working at a small country tavern along the side of a long and winding trail. From the outside, the tavern was seemingly plucked from a different time and hardly impressive to look at, little more than four walls held together by longrusted nails and still standing in no small part due to a great deal of luck. However, once inside few would deny there was a special beauty to the place. I doubt that many of the travelers who stopped by could ever pinpoint exactly where that beauty came from, but by spending day after day there, there was little doubt that what made it so special was the energy it held, created by the people of all ages, races, and backgrounds that filled it.

You see, from the tavern's location on it, the trail appeared to extend in both directions without beginning or end and was always occupied by travelers. Despite being made of earth, the trail itself was smooth and firm, packed down by countless footsteps from countless journeys. Through the windows of the tavern, one could see travelers walking at all times of day and night. Some underwent their journey alone while others were accompanied by companions, some moved with a determined pace as if there was a clear destination in mind while others seemingly just wandered along waiting for a destination to find them, some carried packs on their backs that appeared heavy and burdensome while others carried with them nothing at all. I would often find myself watching these travelers and attempt to recreate their stories. I tried to envision what brought them on their journey, what stage they were through it, and where they were headed. For most of these people I never got answers to my questions, but for those that stopped by the tavern along the way, many times I would. Rarely was the story I discovered similar to the one I had painted in my head.

At the time, I do not think I truly understood how special it was to be entrusted with a glimpse of so many individuals' personal stories, and how much I learned from it as a result. There were travelers who would share their stories freely. They could capture a room like a bard, spinning colorful tales of sickness and health, sadness and joy, failure and success. Others were less vocal about their experiences and what had brought them before me, but I came to learn that that did not mean their stories were any less compelling or powerful.

My job in the tavern did not come with a clear title, but rather a mandate to assist our guests in any way that I could and to make them feel as comfortable as possible. For many travelers, that task was as simple as welcoming them when they arrived, being present with

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them as they relaxed from their travels, and wishing them the best of luck in their journey when they were leaving with the gentle suggestion to stop by again if ever their journey took them back this way. Sometimes I felt that I did nothing at all. For others, my role was a more active one. I would take on the mantle of handyman or tailor, fixing things that the patient carried with them that had been worn down by their journey. More importantly however, I attempted to help alleviate the burden of the things that our guests carried, to lighten their load even if only by a small margin.

I distinctly remember a woman who entered the tavern one day, accompanied by her mother and daughter. She wore a pack on her back like so many others that walked the trail. At a glance, the pack did not appear to be burdensome or to have slowed her down in any way. However, when I took the pack from her shoulders its weight was so immense that it startled me. I could barely carry it, yet she had swung it from her shoulders as if this was nothing out of the ordinary. I sat with her and her family for a long while, and they told me of the trials and tribulations of their journey, the mountains they had scaled and the valleys they had risen from. I could not help but sit in awe as I heard her story. It was suddenly so clear to me why the weight she carried with her was so heavy, but what truly struck me was that she told me that she refused to let it slow her down or prevent her from reaching her destination. Her resiliency was inspiring, her ability to so gracefully manage setback after setback was utterly amazing.

Her story, like the many others I have heard before and since, challenged me to envision things from a perspective other than my own, taught me countless lessons I carry forward with me, and influenced the person I hope to become one day. When they left the tavern that night, footsteps slowly fading, silhouettes blending into the darkness, I could not help but feel fundamentally and lastingly changed.

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What a Swastika Tattoo Taught Me About Social Determinants of Health

Elan Baskir, PGY-2

Internal Medicine-Pediatrics, Rutgers New Jersey Medical School

I reached over his body to auscultate his heart. My stethoscope hovered over his various tattoos before landing on his left upper chest. Below, a large swastika tattoo with jagged lines.

I quickly finished my cardiac exam and covered his chest with his hospital gown, completed the rest of my physical exam and proceeded to preround on all of my other patients.

I wondered if he'd seen my black yarmulke camouflaged on top of my black hair.

What a way to start my first day of residency.

John had cellulitis. His severe skin infection was likely caused by his intravenous heroin use, and he needed to stay in the hospital for intravenous antibiotics. John called me "Dr. B" and then just "B." I kind of liked that, as my impostor syndrome didn't permit me my full title as a new intern. I could hide behind my mask and now informal title as I learned to become a real doctor.

Each day, though, I couldn't stop thinking about his tattoo.

On the day he was getting discharged, I decided to ask him some personal questions so I could better understand my patients in the future.

"If you don't mind me asking, do you feel comfortable sharing how you starting using heroin?"

"Of course, B."

John started by explaining that he had a normal childhood, playing football growing up, doing alright in school. But when he was 16, his mother started using prescribed oxycodone for pain. As her addiction developed, her prescription was insufficient. In those days, she was able to go to a second physician to get more oxycodone pills without the knowledge of the first.

As her addiction worsened, she got creative to satisfy her cravings. She brought John to *his* doctor, and told him to say he had back pain from football. They made a deal: he could keep half the oxycodone and she would keep the other half. He didn't have any pain, but he was a teenager at the time so he starting using the oxycodone. That led him to a downward spiral himself, bringing him eventually to heroin. From heroin, John got into the wrong circles. He got arrested a few times, leading to multiple incarcerations.

"B, in jail," John explained to me, "it's all about protection. You need someone to have your back." And the biggest group at his jail, he said, was the white guys. That's how he got his tattoos. One near his belly button read "14/88," each two-digit number being white supremacy numeric symbols. And the swastika? Same thing. He needed his protection. I didn't fully understand how tattoo machinery was allowed in jail, but John explained that a jailmate

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Macgyvered a pencil to a wire in the dark of the night. That was why his swastika tattoo was so jagged. John wished he could get it removed and assured me that he didn't have any hatred in his heart, despite the tattoo that covered it.

John finished by telling me about his younger brother. How he was so proud of him, now a drummer for a successful band that travels the country. How he made it.

The contrast between John and his brother showed me how much the direction of John's life was determined by one large event. John's offense was being old enough to enable his mother's addiction. John lived on the streets with a heroin addiction, kidney failure and other medical conditions. His brother lived on tour buses with a fanbase and a Spotify following.

His younger brother escaped free. Because John took the hit.

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### <u>A Med/Peds Acrostic</u>

**M**indset that cuts across specialties

**E**ndless possibilities

**D**ouble major that transcends many domains

Perspectives that contribute to system-wide improvement

Eagerness to learn and expand horizons

**D**riven by a small, yet familial group of individuals

<u>Synergism across various facets of care</u>

Reesha B. White Burrell College of Osteopathic Medicine • • •

## Cases

### Transfer from the NICU to the Pediatric ED: Acute Dyspnea in a Postpartum Mother

Jonathan Li, MD<sup>1</sup>, Tanvi Rana, BS<sup>2</sup>, Allie Dakroub, MD, MS<sup>3</sup>

- 1. Combined Internal Medicine-Pediatrics Residency Program, UPMC, Pittsburgh, PA
- 2. Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, PA
- 3. Combined Internal Medicine-Pediatrics, UPMC, Pittsburgh, PA

### Introduction

The differential diagnosis for acute dyspnea in the postpartum period is broad. At standalone pediatric centers where OBGYN providers are not readily available, Med-Peds providers may find themselves as the most qualified providers available to manage postpartum complications.

### **Case Presentation**

We present the case of a G2P1012 33-year-old female with hypertension, obesity, and idiopathic intracranial hypertension who delivered twins at 37 weeks via c-section. On postpartum day (PPD) 6, while visiting her twins in the neonatal intensive care unit, she became febrile, dyspneic, and weak, prompting transfer downstairs to the pediatric emergency department. There she reported progressive dyspnea, orthopnea, and lower extremity edema (LEE). Of note, her pregnancy was complicated by hypertension without preeclampsia. Home medications included labetalol, nifedipine, and aspirin.

Her presenting vital signs were temperature 38.3°C, heart rate 130 bpm, blood pressure 168/110 mmHg, respiratory rate 48, and oxygen saturation 93% on 2L via nasal cannula. Exam was significant for diaphoresis, 2+ pitting LEE, and a well-healing surgical site. An initial workup was performed (see Table 1 for results). She was treated with IV furosemide and broad-spectrum antibiotics before transferring to the women's hospital.

Additional workup was negative for DVT/PE, intrabdominal infection, and bacteremia. Echocardiogram revealed an ejection fraction of 55-60% and grade 3 diastolic dysfunction. She defervesced after 72 hours of antibiotics. No infection source was identified. Five days after presentation, she was discharged with a final diagnosis of volume overload secondary to postpartum preeclampsia with severe features.

### Discussion

The differential for acute postpartum dyspnea includes postpartum cardiomyopathy, preeclampsia, and thromboembolism.<sup>1,2</sup> Preeclampsia is diagnosed with two blood pressures  $\geq$ 140/90 at least 4 hours apart with proteinuria ( $\geq$ 0.3 g in 24 hours) and/or significant end organ damage. Preeclampsia with severe features is defined as blood pressures  $\geq$ 160 systolic and/or  $\geq$ 110 diastolic, LFTs >2x the upper limit of normal, creatinine >1.1 or 2x the patient's baseline, platelets <100,000, or new-onset cerebral/visual disturbances or pulmonary edema.<sup>3,4</sup> Our patient had three major risk factors: chronic hypertension, multifetal gestation, and obesity.<sup>3,4</sup> In

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preeclampsia, placental hypoperfusion releases inflammatory factors leading to maternal endothelial dysfunction.<sup>5</sup> In the postpartum state, subclinical disease may be exacerbated by the resorption of third-spaced fluid. Underlying diastolic dysfunction may further potentiate preeclampsia-induced pulmonary edema.<sup>4,6</sup>

The American Heart Association guidelines for preeclampsia<sup>3</sup> recommend monitoring blood pressure for at least 3 postpartum days. Oral nifedipine and IV hydralazine are central to acute management of preeclampsia. However, nifedipine should be avoided in heart failure with reduced ejection fraction. Patients should also be loaded with 4 g of magnesium for seizure prophylaxis.

### Conclusion

Med-Peds physicians should be aware of common postpartum emergencies as they may have to acutely manage them at standalone children's hospitals. In this setting, postpartum blood pressure monitoring for high-risk mothers may help prevent significant morbidity and mortality, especially for early detection of postpartum preeclampsia where blood pressure control and seizure prophylaxis are essential.



Figure 1: Initial chest radiograph showing increased interstitial edema.

Capillary blood 7.41/33/31/21/3 gas:

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Comprehensive N	<u>letabolic Panel</u>	Hematology	
Na	139	WBC	9.6
K	4.5	Hgb	9.7
CI	109	Hct	29.5
CO2	19	Platelets	548
Anion Gap	11	Neutrophils	81
BUN	21	Bands	2
Cr	0.96	Lymphs	14
Glucose	74	Basophils	1
Са	8	Eosinophils	1
Albumin	1.9	Atypical Lymphs	1
Total Protein	5.7		
Bili, Total	0.3	<u>Cardiac</u>	
ALT	16	Troponin I	<0.015
AST	19	BNP	166
Alk Phos	164		
		Microbiology	
<u>Urine</u>		Blood culture	Negative
Urinalysis	Clear, pH 5.5, spec gravity 1.009, remainder all negative, protein/creatinine ratio 0.14	Respiratory Viral Panel	Negative
Urine culture	Negative	COVID-19 Swab	Negative

Table 1: Initial lab work which remained overall unchanged throughout her hospital course.

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### References:

1. Berens P. Overview of the postpartum period: Disorders and complications. UpToDate. https://www.uptodate.com/contents/overview-of-the-postpartum-period-disorders-andcomplications?search=postpartum%20dyspnea&source=search\_result&selectedTitle=1~150&u sage\_type=default&display\_rank=1

2. Honigberg MC, Givertz MM. Peripartum cardiomyopathy. *BMJ*. 2019;364:k5287. doi:10.1136/bmj.k5287

3. Brown MA, Magee LA, Kenny LC, et al. Hypertensive Disorders of Pregnancy. Hypertension. 2018;72(1):24-43. doi:10.1161/HYPERTENSIONAHA.117.10803

4. August P, Sibai B. Preeclampsia: Clinical features and diagnosis. UpToDate. https://www.uptodate.com/contents/preeclampsia-clinical-features-anddiagnosis?search=preeclampsia%20heart%20failure&source=search\_result&selectedTitle=1~15 0&usage\_type=default&display\_rank=1

5. Karumanchi SA, Lim K-H, August P. Preeclampsia: Pathogenesis. UpToDate. https://www.uptodate.com/contents/preeclampsiapathogenesis?search=postpartum%20preeclampsia&topicRef=6814&source=see\_link#H2

6. Davis M. Acute Cardiac Effects of Severe Pre-Eclampsia. American College of Cardiology. Accessed August 16, 2021. https://www.acc.org/latest-in-cardiology/journalscans/2018/06/25/15/20/http%3a%2f%2fwww.acc.org%2flatest-in-cardiology%2fjournalscans%2f2018%2f06%2f25%2f15%2f20%2facute-cardiac-effects-of-severe-preeclampsia

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### Screening for von Willebrand Disease in a Practicing Jehovah's Witness Undergoing Operative Repair of Congenital Heart Disease

Liana Mosley, MS4 Medical College of Georgia Augusta University

### Introduction

Von Willebrand Disease (VWD) is an autosomal dominant bleeding disorder characterized by a defect or deficiency in von Willebrand Factor (VWF), a protein that functions in platelet adhesion and the coagulation cascade. VWF binds the Gp1b receptor site of platelets in forming a primary platelet plug at sites of endothelial damage. Additionally, it protects Factor VIII of the clotting cascade from being destroyed in circulation.<sup>1-3</sup> Those with insufficient amounts of VWF can present with prolonged bleeding time, a history of mucocutaneous bleeding, and/or continued bleeding after injury, childbirth, or surgery.

### **Case Description**

The patient is an 18-year-old Caucasian female with symptomatic partial atrioventricular canal defect who was referred to Pediatric Hematology for questionable history of VWD prior to receiving cardiothoracic surgery. Her mother states the patient had a bleeding workup performed before receiving tonsillectomy and adenoidectomy (TNA) at age 4. She was found to have prolonged bleeding time, but results were otherwise negative for platelet disorder or coagulopathy. She was given desmopressin and TNA was performed without complication. The patient denies easy bruising, epistaxis, and gum bleeding. She did, however, report heavy menstrual periods before beginning the hormonal contraceptive patch one year ago. Family history was significant for her father experiencing an episode of hemorrhage with TNA in childhood, he has otherwise been healthy. A paternal cousin was reported to have VWD, no other family members are known to have a bleeding disorder. The patient is pursuing operative repair of her congenital heart disease, however, she is Jehovah's Witness and does not consent to receiving any blood products or autologous blood donation. Therefore, her surgeon would like to rule out any bleeding disorder or coagulopathy prior to performing surgery.

### Discussion

VWD is the most common inherited bleeding disorder in the United States, estimated to affect 1% of the population. There are several different types of VWD, but most cases are caused by a mutation in the VWF gene and inherited in an autosomal dominant pattern. The disease should be considered in patients with history of increased bleeding, especially mucocutaneous bleeding or heavy menstrual bleeding, which may signal a defect of platelet function. Less common but more serious presentations include gastrointestinal bleeding, hematomas, and hemarthroses. A positive family history of bleeding also increases the likelihood of VWD.<sup>1-3</sup> Primary workup includes baseline hemostasis assessment, including CBC with differential and coagulation studies. Three additional tests for VWD screening are recommended by the National Heart, Lung, and Blood Institute and can be combined in an assay: VWF antigen, VWF ristocetin cofactor activity, and Factor VIII activity.<sup>4</sup> Patients with VWD will generally have normal CBC results unless significant bleeding leads to iron deficiency anemia. Platelet count is also typically normal, historically patients had prolonged bleeding time though this test is no longer

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routinely performed. They may have normal or prolonged PTT depending on the amount of Factor VIII present.<sup>5</sup> Type O blood types have significantly lower levels of VWF and Factor VIII.<sup>6</sup>

If any screening tests of a VWF assay return abnormal, there are specific confirmatory tests that help determine the type of VWD. The overall prognosis depends on the type of VWD and degree of symptom severity, but several treatment options exist for patients. Desmopressin induces the release of stored VWF in endothelial cells and may also increase Factor VII activity. It can be used to control bleeding in those with mild-moderate disease or when undergoing operative procedures. For patients with severe VWD who fail desmopressin therapy, replacement with concentrated VWF and factor VIII may be indicated. Further symptom control, such as hormonal contraception for those with menorrhagia or anti-fibrinolytics in actively hemorrhaging patients, may also help control blood loss.<sup>7</sup>

### Conclusion

The patient received a full workup of VWD, including CBC with differential, PT/PTT, factor VIII, fibrinogen levels, blood type, and vWF assay. All laboratory values came back within normal limits, and she was found to not have VWD. She will be given Epoetin injections to optimize her hemoglobin levels and will proceed with operative repair of partial atrioventricular canal defect.

### Take Home Points

- VWD is the most common inherited bleeding disorder in the US
- There are several types of VWD and the symptoms and severity of VWD vary widely
- Common presentations include mucocutaneous bleeding and prolonged bleeding after operations, less common presentations include GI bleeding and hemarthroses
- A VWD workup includes CBC with differential, PT/PTT, factor VIII, fibrinogen levels, blood type, and vWF screening assay (VWF antigen, VWF ristocetin cofactor activity, and Factor VIII activity)
- There is no cure for VWD, but symptomatic VWD can be treated with desmopressin, concentrated VWF and factor VIII, and bleeding control with anti-fibrinolytics

### References:

- 1. James PD, Lillicrap D. von Willebrand disease: clinical and laboratory lessons learned from the large von Willebrand disease studies. Am J Hematol. 2012 May;87 Suppl 1 (0 1):S4-11.
- 2. James PD, Goodeve AC. von Willebrand disease. Genet Med. 2011;13(5):365-76.
- 3. Crownover BK, Sleuwen L, Carls C, Ketterman B. Diagnosing von Willebrand disease. Am Fam Physician. 2010;81:1415-1418.
- 4. Nichols WL, Hultin MB, James AH, et al. von Willebrand disease (VWD): evidence-based diagnosis and management guidelines, the National Heart, Lung, and Blood Institute (NHLBI) Expert Panel report (USA). Haemophilia. 2008;14:171-232.
- 5. Roberts JC, Flood VH. Laboratory diagnosis of von Willebrand disease. Int J Lab Hematol. 2015;37 Suppl 1 (Suppl 1):11-17.

• • •

- Liu X, Chen X, Yang J, Guo R. Association of ABO blood groups with von Willebrand factor, factor VIII and ADAMTS-13 in patients with lung cancer. Oncol Lett. 2017;14(3):3787-3794.
- Connell NT, Flood VH, Brignardello-Petersen R, Abdul-Kadir R, Arapshian A, Couper S, Grow JM, Kouides P, Laffan M, Lavin M, Leebeek FWG, O'Brien SH, Ozelo MC, Tosetto A, Weyand AC, James PD, Kalot MA, Husainat N, Mustafa RA. ASH ISTH NHF WFH 2021 guidelines on the management of von Willebrand disease. Blood Adv. 2021;5(1):301-325.

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### **Back Pain in an Adolescent Patient**

Erin Tully, PGY-2 Internal Medicine-Pediatrics, CHOP/Penn

### Introduction

This is the case of an 18-year-old male with a remote history of synovial sarcoma of the right foot requiring below the knee amputation and mild persistent asthma who presented to the emergency department of a pediatric hospital with subacute back pain.

Back pain is considered an unusual complaint in pediatric patients often necessitating a thorough evaluation for an underlying cause. In adult patients, however, back pain is extremely common and is most often attributed to a benign nonspecific cause. Recent literature in pediatrics has revealed that back pain is a more common pediatric complaint than once thought and may not always necessitate a full workup. In infants and young children back pain does often have an identifiable source, but more data has emerged to support that the cause of back pain in adolescents and young adults is most commonly benign and self-limited. Despite these trends, it remains important to take a detailed history with particular attention to warning signs which may point to a more serious cause of back pain in pediatric and adult medicine.

### Case Description

The patient is an 18-year-old male who presented to the Emergency Department with approximately two weeks of back pain. He described the pain as throbbing and located in his upper and mid-back region. The pain was worse when lying flat but did not awaken him from his sleep. He denied recent injury to his back though did note that his box spring had been broken for several weeks. He also endorsed pain radiating to his bilateral shoulders but denied new weakness or changes in sensation. He had no associated fatigue, weight change, chest pain, shortness of breath, abdominal pain, nausea, vomiting, or diarrhea. His past medical history was notable for a history of right ankle synovial sarcoma which was resected when he was 8 years old, but ultimately required right below the knee amputation for positive margins. He did not require chemotherapy and had no evidence of recurrence on surveillance monitoring, though he had been lost to follow up for several years. He otherwise continued to see his primary care provider annually and had one prior ED visit for an asthma exacerbation two years prior to this presentation. Family history was notable for lung cancer in several adult relatives who smoked tobacco products.

The patient's back pain acutely worsened 2 days prior to presentation prompting him to present to the Emergency Department (ED) with his mother. In the ED, his vital signs were notable for a blood pressure elevated to 156/81 and he was uncomfortable appearing, reporting 10/10 pain that improved slightly with ibuprofen. His physical examination was notable for distant heart and lung sounds, and mild tenderness to palpation over the spinous process and

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paraspinal muscles in the thoracic spine. He had a right foot prosthesis in place but full strength, sensation, and range of motion of all extremities. Laboratory testing included a complete blood count (CBC) notable for leukocytosis with a WBC of 12.3 K/uL and the differential, hemoglobin, and platelets within normal ranges. A basic metabolic panel demonstrated mild hyponatremia with sodium of 134 mmol/L. A C-reactive protein (CRP) was elevated to 3.8 mg/dL and lactate dehydrogenase (LDH) was elevated to 1,098 U/L. An x-ray of the thoracic spine was obtained and revealed a large partially imaged calcified soft tissue mass in the left hemithorax causing rightward mediastinal shift. A previous chest x-ray from 5 years prior to this presentation had been normal.

Further imaging was obtained including a chest x-ray which fully visualized the large partially calcified mass filling most of the left hemithorax with rightward tracheal and mediastinal shift and compressive atelectasis of the superior left lung. Given the degree of mediastinal shift and size of the thoracic mass, the patient was admitted to the Pediatric Intensive Care Unit (PICU) for intensive monitoring while undergoing further evaluation. A CT of the chest further characterized the mass as a large circumscribed necrotic soft tissue mass arising from the anterior aspect of the left hemidiaphragm with rightward mediastinal shift, left ventricle compression and mild compression of the left main pulmonary artery. An echocardiogram demonstrated qualitatively normal biventricular function and normal flow pattern through the left pulmonary artery. An ultrasound guided percutaneous biopsy of the thoracic mass was performed with pathology consistent with metastatic synovial sarcoma. He was initiated on ifosfamide, doxarubicin, and pazopanib chemotherapy as well as radiation therapy given the size and location of the mass.

### Discussion/Conclusion

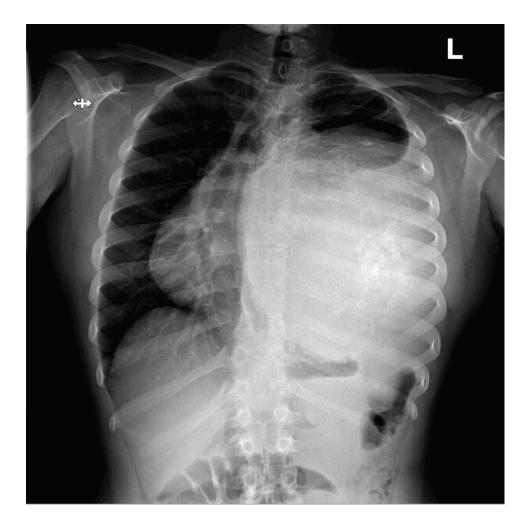
Sarcomas are a rare malignant tumor originating from soft tissue or bone. These tumors most often occur in the extremities, but can occur anywhere in the body. Synovial sarcomas are an uncommon subtype characterized by a chromosomal translocation t(X;18)(p11;q11) and named for their histologic resemblance to synovial cells. The most common site of primary tumor growth is the extremity, but recurrence is common and can be local or metastatic. In this patient, the initial primary tumor was large and required amputation for clear margins but he was not treated with chemotherapy. His initial monitoring for recurrence had been reassuring, but given the years of lapsed care it is likely that the recurrent tumor had been slowly growing for some time in a place that was not visible to the patient or his family and he remained largely asymptomatic. While the cause of his back pain is a rare cause of back pain, this case demonstrates the importance of approaching a young adult with a pediatric medical history with an open mind and broad differential with special attention to any warning signs to indicate a pathologic cause. Unfortunately, this patient's cause for back pain was identified late in the course of disease recurrence and his overall prognosis largely depends on his response to treatment to facilitate total resection. The patient is currently continuing to undergo

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chemotherapy and daily radiation therapy. The ultimate goal will be significant tumor regression with further consideration for resection in the future.

### Take Home Points

- Back pain is a more common chief complaint in pediatric patients than traditionally thought, but may not always require a full diagnostic work up in older patients
- It is important to take a thorough history and perform a detailed physical examination in patients presenting with backpain though the cause is often benign or musculoskeletal in nature
- Any concerning historical or physical examination features warrant a more thoughtful diagnostic evaluation, even in patients who present more similarly to adults



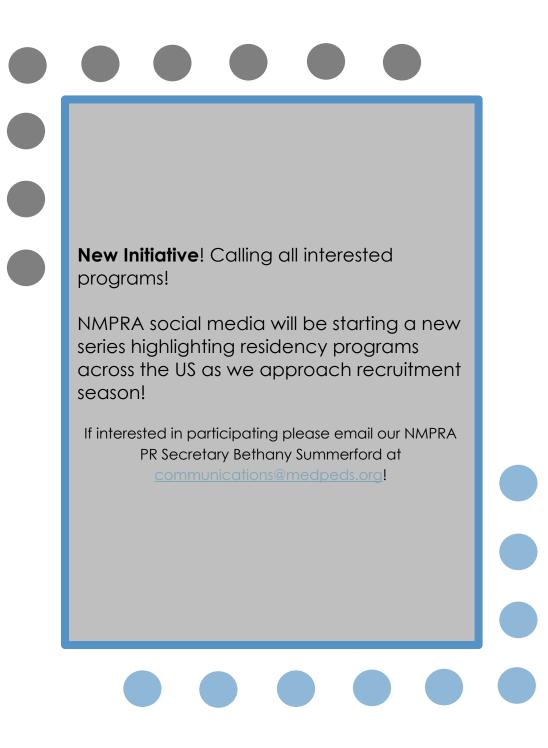


### References

- 1. Lamb, M., & Brenner, J. S. (2020). Back pain in children and adolescents. *Pediatrics in Review*, 41(11), 557–569. <u>https://doi.org/10.1542/pir.2019-0051</u>
- National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Soft Tissue Sarcoma. <u>https://www.nccn.org/professionals/physician\_gls</u> (Accessed on August 16, 2021).
- 3. Ryan, C. W., & Meyer, J. (2021, June 4). Clinical presentation, histopathology, diagnostic evaluation, and staging of soft tissue sarcoma. Uptodate. <u>https://www.uptodate.com/contents/clinical-presentation-histopathology-diagnostic-evaluation-and-staging-of-soft-tissue-sarcoma?source=history\_widget</u>.
- 4. World Health Organization Classification of Tumours Editorial Board. Soft Tissue and Bone Tumours, 5th ed, International Agency for Research on Cancer, 2020. Vol 3.

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