



Contents lists available at ScienceDirect

Journal of Pediatric Surgery

journal homepage: www.elsevier.com/locate/jped surg



Robert E. Gross Lecture

The 2020 APSA Robert E. Gross Lecture: Pediatric Surgery, COVID 19, and the moral compass



Mary L. Brandt

Tulane University School of Medicine, Pediatric Surgeon, Children's Hospital of New Orleans, 1430 Tulane Avenue, New Orleans, LA 70112.

ARTICLE INFO

Article history:

Received 19 October 2020

Accepted 20 October 2020

Key words:

Robert E. Gross lecture

APSA

COVID 19

Pediatric surgery

Social justice

© 2020 Elsevier Inc. All rights reserved.

Contents

And what we have seen cannot be unseen	1
Using a compass	2
Medical education	2
Research.	2
Social justice	3
Social locations, Justice, and Learning New Ways to See	3
Final thoughts	3
References	4

What an incredible honor to open our annual meeting with a chance to think with you about where we are, where we are going, and the moral tools we need to guide us on this important journey. Last fall, as I started planning for this talk, I was thinking in terms of metaphorical voyages and dream destinations. But it's not metaphorical anymore. We are on a crazy, previously untraveled, and frankly treacherous journey together. We know where we started... "before COVID19" and we know where we are heading... "after COVID19"...but the unknowns we are facing are frightening and at times almost overwhelming. What do we need for this journey? How can we best navigate through the terrible hardships and unthinkable decisions that all of us will be making? On one level, it's no different from any other voyage. We need to know where we are now. We need to know where we want to end up. And then we need a map and a compass to get there.

When I first started thinking about this topic last fall, we lived in a

world filled with restaurants, meetings, flights, elective surgeries and gatherings with friends. But it was also a world filled with inequities and moral issues that affected our patients, our families, our friends and our neighbors.

And then

The world stopped.

It's hard to imagine that there might be gifts arising from this horrendous pandemic, but as a result of the isolation needed to protect us, we've all experienced a pause.... a pause that has given us the space and the time we needed to notice things we maybe didn't see before.

And what we have seen cannot be unseen

The writer and film director Julio Gambuto described the things we see more clearly now like this... "A carless Los Angeles with clear blue skies....a health care system that cannot provide basic protective equipment for its frontline...small businesses – and very large ones – that do not have enough cash to pay their rent or workers...a government that has so severely damaged the credibility of our media that 300

E-mail address: mbrandt@tulane.edu.

million people don't know who to listen to for basic facts that can save their lives." [1].

I think it's important that we ask ourselves this - Will we use this moment to ponder how we ended up here? Will we use that knowledge and our new way of seeing to make the changes we need to improve the lives of children?

Using a compass

I suspect that all of you have used a compass at some point in your life but, like me, you probably haven't given it much thought. The classic compass uses a fixed point (the magnetic north pole) as a point of reference. And, with that fixed point, and knowing which direction you want to go, you can determine your bearing. The definition of bearing pertinent to this discussion is "direction, especially angular direction measured from one position to another using geographical or celestial reference lines" [2]. But what an interesting and multi-level word, because bearing can also mean "the way we carry or conduct ourselves, support of parts in a structure, something that supports heavy things, and, as in bear fruit or offspring, it can mean bringing forth new things" [2]. Once we understand where we are now, we can find our bearing, carry ourselves with courage and hope, support the heavy parts of this time for each other, and bring forth new things to better ourselves and our profession. I learned another important detail about compasses in preparing for this talk. A compass has to be held steady and level to work; "...when the compass is held level, the needle turns until, after a few seconds to allow oscillation to die out, it settles into its equilibrium orientation" [3,4]. What a great image. You have to be still for a compass to work.

So, let's take advantage of this unique time and the stillness it provides to think about our journey together as pediatric surgeons. Our journey as a specialty in the United States began in 1927 when William Ladd was appointed Surgeon in Chief of Boston Children's Hospital. It continued with the founding of the Surgical Section of the American Academy of Pediatrics in 1955 and the American Pediatric Surgical Association in 1970 [5]. The giants whose shoulders we stand on took a fledgling field and guided it to where we are now, with evidence based, highly skilled care, and amazingly trained surgeons. There is little doubt that moving forward, pediatric surgery, thanks to our surgeons and our leaders will continue to change the world... one child and one community at a time. The best way to do that is with a strong moral compass, but that means where we stand now.... and where we want to go. There are many parts of our collective journey that we could ponder together, but there are three that I think are critically important.

Medical education

We recruit wonderful students into medicine, young people who are bright, dedicated and altruistic. These amazing students become fearless, hardworking, and dedicated general surgery residents. And, in pediatric surgery, we get to pick the best and the brightest of these residents to train as our future colleagues. Our specialty - and medicine as a whole - has no problem with who practices, how hard they work, or how dedicated they are to the art and science of medicine. We also have an army of talented and dedicated educators, who during this pandemic have almost instantaneously created new ways to keep medical education moving forward. We don't lack for great people here, either. But our system of training medical students, residents and pediatric surgeons has issues that we need to be honest about, too.

If we were to use a moral compass to guide us past the issues that hold us back from a better future for medical education, what changes would we want to make?

This pandemic has revealed again the astounding debt that our residents and young colleagues face. Training physicians and other healers is expensive. Almost every other industrialized nation has recognized that medical education is something that is necessary for public health and public wellbeing and for that reason, medical school is either free

or highly subsidized [6]. Restructuring the financing of medical education is an important goal for our field and for our country if we want to keep recruiting the best students into medicine. This change would have another potential benefit. Students would be more at ease choosing a primary care specialty if they knew they could avoid hundreds of thousands of dollars of debt, helping to fill a need that, once again, this pandemic has accentuated. As we move towards the goal of more equitable and affordable medical education, we also need to forgive debts already incurred - especially given the incredible sacrifices and courage our young colleagues have demonstrated during this pandemic.

As we watch hospitals furlough and lay off key personnel as a result of lost income due to the pandemic, we must grapple with what this means in terms of graduate medical education. The fact that resident salaries are linked to hospital finances has two significant negative consequences. First, residents can only work in hospitals which control their salary - even if those locations are not optimal for their training. The second consequence of our current system is the risk it creates for our field. Hospitals are realizing that they can get the same benefit - in terms of work - from mid-level providers that residents previously provided. It's not their fault - hospitals in general have no mission to educate. For hospitals, even training hospitals, it's a purely financial equation... which means we are in imminent danger of losing over half of our GME funded positions in the very near future if we don't come up with an alternate solution.

The other casualty of our current educational system is poor faculty participation in medical student and resident education. In many, if not most institutions surgery faculty pay a penalty if they teach. Educating future physicians, surgeons and pediatric surgeons is our responsibility. Somehow, we must develop a system that not only rewards but incentivizes those who teach.

We started the pandemic in the midst of an epidemic of physician burnout [7–10]. Needless to say, the pandemic has led to even more distress for physicians and other healers, distress that often leads to physical, emotional and even spiritual harm [10,11]. There are many words for this distress - burnout, compassion fatigue, healer distress syndrome - but it is a poorly understood condition, which can be career and/or life limiting. Addressing the health and wellbeing of all healers must become a well-resourced part of education for all trainees and practicing surgeons.

Research

The second topic I want us to consider is our responsibility to create a better future for our patients through research. As pediatric surgeons we live in a time where we know how to know and, more importantly, how to know when we don't know. It's crystal clear that research is critically important for our mission. But in our current system, there is less funding available and more pressure on surgeons to generate clinical income, which disincentivizes our colleagues to pursue their research dreams [12,13].

As we think about how to map our journey in terms of scientific research it's important we start with the obvious: **There can never be two "opinions" about a scientific fact.** It's part of our responsibility as physicians to advocate for honesty and scientific integrity and to call out falsehoods that might adversely affect the children in our care or their families. On a more societal level, we can only move forward if we support medical research, a lesson our country is learning in real time as a result of COVID19. But, like medical education, it is important we ponder how we have evolved into a system that makes it difficult for physician-scientists to accomplish the research they are inspired to pursue. We need accomplished physician-scientists to advance medical science, which is only possible if we find ways to support researchers at the beginning of their careers and through times of lean financial support for those with established research programs. Our new paradigm should strive to not only allow but actually incentivize trainees and faculty to do research.

Social justice

Pediatric surgeons have a heart for children and, as we often remind ourselves, we are in the business of saving lifetimes, not lives. But if we are to take our role seriously, we must dedicate ourselves to protecting the future of all children, not just the individual child in front of us, which is the third topic I'd like us to consider.

In 2018, after a steady decrease, the number of uninsured children in the United States rose to 3.9 million children... or over 5% of all American children [14]. We don't know how many of the 22 million Americans who lost their jobs so far during this pandemic have children...but it is fair to say that we are facing an increase, perhaps of epic proportions, in uninsured children as a result of the COVID19 pandemic. We also know that the crisis of access to medical care is, has been, and will continue to be disproportionately injurious to children of color [15]. We are proud, as pediatric surgeons, to save lifetimes instead of lives, but what does that really mean if we are guided by a moral compass? I don't think there is any way around it. There is no moral or ethical position that can support anything less than universal access to health care for children. But it goes beyond just access to health care. We are in the business of saving lifetimes, which means creating a system where children can thrive, grow and meet their potential. We have an obligation to use our platform to promote and support equal educational opportunities, protect families from financial ruin, especially from bankruptcy due to hospital bills, and to be advocates for the basic things children need to reach their full potential such as healthy food, clean water, and clean air.

But none of this can happen without learning new ways to see....

Social locations, Justice, and Learning New Ways to See

Just like unpolluted Los Angeles which we are able to see for the first time in decades, let's use this time, this pause, to learn how to really see...

Let me start with a concept that you may not have heard about yet. Each of us has a "social location" that is a composite of our social identities e.g. gender, race, sexual identity.

There is a perceived (and totally constructed) "hierarchy" of these social identities in every society. In the United States, at this moment, it's pretty clear that the "dominant" social location is white, male, cis-gendered, heterosexual, less than 60 years old, able-bodied, and born in the United States. (I'm leaving it there without adding other aspects of social location such as immigrant status, education, etc.) Here's the main thing to learn from this concept - It affects what you can see. If you are in a "dominant" social location (i.e. white, male, heterosexual, cis-gendered and/or able-bodied), you most likely cannot "see" the location of others that are not equally "dominant"... even though you think there is no way you would treat a colleague, family or patient differently because of their social location.

David Foster Wallace describes this phenomenon in his amazing commencement address *This Is Water*; "There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says "Morning, boys. How's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes "What the hell is water?" [16]

The "water" of American society is white, male, heterosexual, cis-gendered, young, and able-bodied. It's so pervasive we can't even see it. Let me give you a concrete example. A well-respected surgical leader, who I consider a friend and an ally to women in surgery stopped me one day in the hall. He was very excited about something he had just learned and couldn't wait to share it. He said to me "Did you know that male physicians are introduced with their titles more often than women? I wasn't sure but I started paying attention and it's true!" What I thought in response to his question was ... "Only since day one of medical school." But what I said was "That's fantastic!" Studies have shown that when a man introduces a woman speaker he will refer to her with her title only 49.2% of the time. When he introduces another

man, it's 72.4% of the time [17]. My friend is an ally. He is a great guy who had no idea what he couldn't see... until he could.

I'm not naïve and I certainly don't believe there is a quick fix - but I do know this. As surgeons, when we find ourselves in the middle of a complex operation where something hasn't gone as planned, we don't throw up our hands. We move a little to the right...check the compass, correct our course. We keep going, one step at a time... slowly and deliberately until we arrive at our destination... a patient waking up in the PACU, their family around them, closer to health when we finished than when we started. So, what if we looked at the complex issues we face as those responsible for educating, creating and protecting the future and use this same skill set?

For many years, I have had a sign over my desk with this quote from Jack Kornfield. "At the end of everyone's life, there are only two questions they ask - Did I live wisely and did I love well?" [18]. For me, that's a pretty good "north pole" to guide my journey towards a more moral life. But however you choose to articulate your individual purpose, whatever you decide what your "true north" is, the next important task, now and repeatedly, is to ask yourself "Am I on course?"

There's an image I'd like to share with you as a great metaphor for being on this journey. (Fig. 1) I took this photo in February, just about the time the first case of COVID19 was diagnosed. This is the edge of the frozen Hudson Bay in Churchill, Manitoba. The magnificent stone marker in the foreground is called an inukshuk. The First Peoples of the Arctic Territories use inukshuks 'for navigation, as a point of reference, a marker for travel routes, designate good fishing or hunting places, and mark places of veneration' [19]. What I have tried to do today is give each of us the professional and personal equivalents of inukshuks for our profession and this wonderful organization.

As we navigate towards a moral and better future in education, we need to look for markers that show us the path to

- Reduce and forgive medical student debt
- Give surgical program directors financial control of resident education
- Provide faculty time to teach, and teach well
- Provide resources to educate, study and treat healer distress syndrome

The markers to look for as we do the research needed to improve the wellbeing of children in the future are those things which

- Promote honesty and integrity in research and medicine
- Speak to how important research is for our society
- Support scientific research which will better the lives of children
- Allow students, residents, and faculty to follow their academic dreams

The markers to look for as we travel towards justice for all are those things which

- Help us understand the impact our social locations have on our ability to see inequities
- Promote equality, equity, diversity and inclusion in our workforce
- Promote and support equal education, clean air, clean water and good food for children
- Lead us towards universal health care for children

Final thoughts

When we think about trying to change the future, it's overwhelming. But like the old adage of how to eat an elephant (the answer is one bite at a time), the most important thing is to just get started... take the first step. And when I talk about first steps, I'm talking following the inukshuks which point us towards a better future for our profession and the children we care for. But I'm also talking about our daily interactions with patients and colleagues, the work we do in committees, the time we spend at a computer documenting patient care, and the act of just being present and bearing witness during this time of deep, deep sorrow as we live through the suffering around us from COVID19. In all these moments we must ask ourselves - Are my actions bringing us



Fig. 1. Inukshuk and Northern Lights, Churchill, Manitoba, Canada.

closer to where we'd like to end up? If not, how can I correct my course just a little to get us closer than we would have otherwise been? That's all it takes, actually. One by one, we begin to define how we are individually going to be better people, which becomes how our profession and society improve, which results in concrete changes to improve the lives of children.

References

- [1] Gambuto JV. Prepare for the ultimate gaslighting*. *Medium*. Available from: <https://forge.medium.com/prepare-for-the-ultimate-gaslighting-6a8ce3f0a0e0/>; 2020. [Accessed 14 October 2020].
- [2] Merriam Webster. Definition of bearing. Available from: <https://www.merriam-webster.com/dictionary/bearing>. [Accessed 14 October 2020].
- [3] Brandt ML. We all need a compass. *wellnessrounds*. Available from: <https://wellnessrounds.org/2017/03/29/we-all-need-a-compass/>. 2017. Accessed October 14, 2020.
- [4] Wikipedia. Compass. Wikipedia. Available from: <https://en.wikipedia.org/w/index.php?title=Compass&oldid=979629262>; 2017. [Accessed 14 October 2020].
- [5] Zeller KA, Nakayama DK, Fraile K, et al. History of pediatric surgery. Available from: https://www.pedsurglibrary.com/apsa/view/Pediatric-Surgery-NaT/829734/all/History_of_Pediatric_Surgery?refer=true; 2020. [Accessed 14 October 2020].
- [6] Zavlin D, Jubbal KT, Noé JG, et al. A comparison of medical education in Germany and the United States: from applying to medical school to the beginnings of residency. *GMS Ger Med Sci*. 2017;15. <https://doi.org/10.3205/000256> Epub ahead of print September 25.
- [7] Tolentino. What's new in academic medicine: can we effectively address the burnout epidemic in healthcare? Available from: <https://www.ijam-web.org/article.asp?issn=2455-5568;year=2017;volume=3;issue=3;page=1;epage=12;aulast=Tolentino>. [Accessed 15 October 2020].
- [8] Rothenberger DA. Physician burnout and well-being: a systematic review and framework for action. *Dis Colon Rectum*. 2017;60:567–76.
- [9] Ruzycski SM, Lemaire JB. Physician burnout. *Can Med Assoc J CMAJ* Ott. 2018;190:E53.
- [10] Brandt M. Sustaining a career in surgery. *Am J Surg*. 2017;214:707–14.
- [11] Shanafelt T, Ripp J, Trockel M. Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *JAMA J Am Med Assoc*. 2020;323:2133.
- [12] Mesquita-Neto JW, Dailey W, Macedo FI, et al. Patterns of National Institutes of Health Grant funding to surgical research and scholarly productivity in the United States. *Ann Surg*. 2020;272:539–46.
- [13] Dunn AN, Walsh RM, Lipman JM, et al. Can an academic RVU model balance the clinical and research challenges in surgery? *J Surg Educ*. 2020;5. <https://doi.org/10.1016/j.jsurg.2020.05.029> Epub ahead of print August.
- [14] Alker J, Corcoran A. Children's uninsured rate rises by largest annual jump in more than a decade. *Center for Children and Families*. Available from: <https://ccf.georgetown.edu/2020/10/08/childrens-uninsured-rate-rises-by-largest-annual-jump-in-more-than-a-decade-2/>. 2020. Accessed October 14, 2020.
- [15] Flores G, Tomany-Korman SC. Racial and ethnic disparities in medical and dental health, access to care, and use of services in US children. *Pediatrics*. 2008;121:e286–98.
- [16] Wallace DF. This is water. Available from: <https://fs.blog/2012/04/david-foster-wallace-this-is-water/>; 2005. [Accessed 14 October 2020].
- [17] Files JA, Mayer AP, Ko MG, et al. Speaker introductions at internal medicine grand rounds: forms of address reveal gender bias. *J Womens Health*. 2017;26:413–9.
- [18] Kornfield J. *A Path with Heart: The Classic Guide Through the Perils and Promises of Spiritual Life* Ebury Digital ; 2008.
- [19] Wikipedia. Inuksuk. Wikipedia. Available from: <https://en.wikipedia.org/w/index.php?title=Inuksuk&oldid=983078086>; 2020. [Accessed 14 October 2020].