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KATE BASTINELLI, HOST:

Welcome to *Perspectives*. I'm Kate Bastinelli from the Greater New York Hospital Association. I'm joined by my GNYHA colleague Jenna Mandel-Ricci, who will be interviewing Dr. Alyssa Silver, Assistant Professor of Pediatrics and attending physician at the Children's Hospital at Montefiore; and Dr. Noé Romo, Assistant Professor of Pediatrics and Director of the Pediatrics Inpatient Service at Jacobi Medical Center and Medical Director of the Bronx Stand Up to Violence program. We'll be discussing their firearm injury prevention work and the role health care providers and institutions can play in firearm injury prevention.

Let's get started.

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JENNA MANDEL-RICCI:

On average, 100 Americans are killed by firearms each day, with many more injured. Health care providers witness firsthand the pain and trauma that firearm injuries and the culture of violence around firearms inflict on patients, their families, and their broader communities. Thank you both for joining us to discuss this pressing topic.So, Dr. Silver and Dr. Romo to get us started, I'm going to ask each of you to describe your day job as a health care provider. Dr. Silver, can we start with you?

DR. ALYSSA SILVER:

Sure, thanks for having me. I am a pediatric hospitalist, which means that I take care of children who are admitted to the hospital for a variety of different reasons. Because I work at an academic children's hospital, my time is divided between doing all of the day-to-day patient care and taking care of the patients, as well as some other opportunities to both teach students, residents, fellows, as well as doing some research and some advocacy work. And so, I have a significant interest in protecting children from firearm injuries as sort of my little niche of focus.

MANDEL-RICCI:

Thank you, and Dr. Romo, why don't you tell us about your day job as a health care provider?

DR. NOÉ ROMO:

So similar to Dr. Silver, I'm also a pediatric hospitalist here in the Bronx and the City Hospital here in the Bronx at NYC Health and Hospitals/Jacobi and the director of the Pediatric inpatient service, so I helped run the initiative part of the service, along with seeing patients as well. I'm also the medical director of the stand up to violence program, which is Jacobi's hospital-based community violence prevention initiative

where we respond to all victims of violent trauma and have a double pronged approach and a community and hospital based approach to try to treat violence like a disease and try to prevent reinjury in our patients. And I'm also involved in education in terms of teaching our pediatric residents and also the pediatric medical students that come through from the Albert Einstein College of Medicine.

MANDEL-RICCI:

Thank you both so much. So, next I'd like to talk a little bit about how both of you became interested in the issue of firearm injury and gun violence prevention. What was your path to this work and what continues to motivate you to do this work?

ROMO:

So, you know I was a pediatric resident here at Jacobi, which is level 1 trauma center here in the Bronx. And in my training here, we saw multiple victims of violent trauma and just realized that we were doing an excellent job at treating their medical injuries and taking care of them, but we were discharging patients right back to the same neighborhoods where they were injured, and not really doing much for them in terms of preventing them from coming back or doing any kind of intervention at the community or hospital level. That kind of sparked an interest in me after I finished my training here to go on to do a fellowship and get my master's in public health focusing more on community-based initiatives and how I could implement that public health practice into my model here in the hospital to try to treat violence like a disease and not just look at it as a kind of social norm that was beyond the scope of physicians, but something that we could actively do both at the Community and at the hospital level. Also, on the personal level, I was born and raised in east Los Angeles in the 80s and 90s where there was definitely a lot of violence and violent trauma that I was surrounded by growing up. Definitely had some family members and friends who were victimized by violent trauma. So, for me it also is personal in that in that end of having experienced some of that growing up and seeing some of those patients here really brings you back to where I grew up and trying to prevent other children from going through similar consequences in their neighborhoods.

MANDEL-RICCI:

Thank you, Dr. Romo. Dr. Silver, what motivated you?

SILVER:

So, somewhat of a circuitous route to get here. I remember learning a little bit about gun related injuries in pediatrics during my residency and not having a huge exposure during my training to that, but learning a little bit about ways to counsel families, again, not with a huge emphasis. But not really having the kind of awareness of the complete burden of this problem and the burden of this disease of gun violence that affects children in our country. So early in my career, it wasn't necessarily a focus of mine until, I remember going to a big conference and I had some time in between different sessions that I was attending and so I kind of stumbled into a session that was on firearm related injuries. And I remember sitting there and hearing the statistics that I guess I had not previously been aware of. How many children are affected by firearm injuries and thinking wow this is crazy, we have to do something about this. And at that time, I was doing

bronchiolitis research and I remember coming back from this conference and saying to one of my colleagues that I work very closely with that no one really addresses this, there's very little research on this topic in Pediatrics, so we should really kind of look at this a little bit more thoroughly. And we're saying no, no, we just, let's just finish this big bronchiolitis study we're doing, and we'll, you know, then we'll do one thing at a time. And so I kind of let it simmer there for a little while, and then a couple of years later, my son, who then at the time was in kindergarten, and I remember I went out and I bought him a dinosaur t-shirt that was glow in the dark. And when I went to give it to him, thinking he would think that was so cool, I remember him saying to me oh that's cool but Mommy I can't wear that to school. I said why, you like the shirt? He said no because it glows in the dark. And we have to do these things in school where we have to hide in the corner in the dark from the bad people with the guns. And if it glows, then the bad people with the guns will see me. And I just remember it was a very heartbreaking moment for me as a parent, and thinking this is the way that children in our country are affected by this even if they're not directly affected by gun violence. And so that really motivated me to feel like we have to do more.

MANDELL-RICCI:

Dr. Silver, thank you for sharing that. It's just interesting reflecting on both your answers, you both talked about very personal stories, but you also talked about the data and just the quantity of lives that are impacted by this. And Dr. Romo, you talked about treating violence like a disease and the public health approach to violence. For you, what's the mindset shift when you think about treating something from a public health perspective and treating violence like a disease?

ROMO:

Yes, of course. You know, it's interesting, I mean similar to Dr. Silver's experience of being kind of questioning when you express interest in this line of work. You know, when I went to my fellowship and I said I want to do this kind of work at being engaged and researching regarding to gun violence and being involved in some community hospital-based intervention. You know, I was told by some people that should leave that kind of work for the police officers, leave it for the social workers. How is gun violence a medical issue? You should focus on things like Dr. Silver said, like bronchiolitis and asthma,and things like that of patients getting admitted. You're a hospitalist, why do you worry about community-based things? And my response is always like look at if children are getting shot, and are getting injured, they're coming to my service and the inpatient service, that's my problem. And my job as a hospitalist is not just a treat their acute illness or injuries, it's also to prevent that illness or that injury from occurring again. Because if I just send the patient back for any type of admission, for any type of disease back to the same setting or back to the same reasons why they came in the first place, then I failed, right? They're just going to keep coming back. I think there has to be a change in perspective and how we look at violent trauma. Because it is so deeply rooted in a lot of longstanding social economic inequities and social economic issues, at least when it comes to urban violent trauma. It's a lot easier for people to kind of dismiss it as something that's more of a societal issue, not necessarily a medical issue. So, I think from a public health perspective, for me it was looking at it similar to what we do with infectious diseases. Looking at how can we engage in primary, secondary, and tertiary prevention? Meaning how can we engage in some type of intervention where we can prevent the violence from ever even occuring? How can we have another arm where we address it early on when we see signs of violent behavior or violent trauma? And lastly, how can we treat patients who are already

severely victimized by violent trauma but maybe prevent them from getting injured again to the degree that they die. Which is similar to what we do with any kind of infectious disease, right? It's how could we have that three-pronged approach to preventing it?

MANDEL-RICCI:

Thank you so much and I'm so glad that you brought up the concepts of primary and secondary and tertiary prevention, which are obviously foundational to a public health approach. And I actually want to use that as a sort of launch for the next set of questions. So, Dr. Silver, at Montefiore, I'm familiar, but our listeners may not be, about the work that you do at the hospital, which is a primary prevention approach, around firearm safety and storage. So, can you talk a little bit about that program and how it fits into that public health approach and is a primary intervention?

SILVER:

So, we have chosen here at the Children's Hospital at Montefiore to use the Be SMART information intervention, which is really an educational initiative for parents and caregivers that focuses on primary prevention of gun related injuries and focuses on safe storage. And so, rather than having people investigate whether there's a gun in a home, or how it's stored, it's just kind of a blanket educational initiative to talk about if there are guns in the home, this is how to keep children safe from them. The Be SMART campaign uses an acronym, S-M-A-R-T, which focuses on securing firearms from children and adolescents, modeling responsible behavior around firearms, asking about guns in other's homes, when your children go there to spend time, recognizing the role of guns in suicide, and telling others to Be SMART, and to kind of talk about this topic in circles of family and friends to make this a little bit more well-known of an issue that can affect children. And so, we have used this model and there's also a really well-done video that talks about all of these tenants of the Be SMART educational intervention. So, in the hospital, families are able to view the video and also receive some of the little flyers, handouts that go over this information about safe storage and asking about guns in the homes of others in their welcome packet of information that they get when their child is admitted to the hospital. Often, when parents are in the hospital with their kids there's a lot of downtime, so there's certainly an opportunity to watch a video or look at some information, and then there are times where it spikes sparks conversation with the members of the team, either the nurses, the doctors to kind of talk about it a little bit more.

MANDEL-RICCI:

And Dr. Silver, what has been the reception from patients and families?

SILVER:

So, at first when we started this, we were a little nervous that people might be taken aback by it, but actually, really, the majority of families are quite receptive to talking about these issues. A lot of parents, when they see the video, you can see that lightbulb moment when they're like wow, I never really thought about these things. And so, I think that on the whole, people are receptive. Because it's not talking about whether you

have a gun or not in the home. The initiative is really focused on if there is one, trying to prevent a child or a teenager from accessing it. And that access can lead to a fatal injury.

MANDEL-RICCI:

Thank you so much, and Dr. Romo, the Bronx Stand Up to Violence program is really an example of a secondary and, even I'm sure, even a tertiary strategy. Can you share a little bit about the program, and how it works, and especially how you partner with organizations outside the hospital?

ROMO:

Sure, well actually it's primary, secondary, and tertiary, and I'll start with the primary intervention because it is a community and hospital-based approach. So, from the community standpoint, the primary intervention primarily happens where we have a network of community outreach workers, four currently, we carry a caseload of up to 20 community participants at a time, and these are individuals who are not admitted to the hospital, who have yet to be injured, but who have been identified as high-risk individuals in the community who are either high-risk for being injured, because of their active involvement in a gang or an active dispute, or they're higher risk for being the proprietors of that violence by being involved with gang violence or in an active dispute. So, there are people that we take under our wing and mentor, essentially, try to provide different resources, whether it be job resources, academic resources, or essentially just giving them something else to do in the community and just trying to provide some mentorship to counsel them with conflict mediation to prevent them from being actively involved in a conflict. The secondary and tertiary component of the program encompasses our hospital-based approach. Where our Stand Up to Violence team, comprised of myself, our two social workers, and our outreach workers, see every patient gets admitted to the hospital, regardless of age, for either gunshot wounds, stab wound, or assault. The reason why we expand it beyond just gunshot wounds is that violent trauma encompasses far more than just gunshot wounds; stab wounds and assaults are also significant. And especially in a lot of urban areas, and there's well documented literature noting that you come back for, let's say an assault or a stab wound, you're almost four times more likely to come back a second time for a gunshot wound or more fatal violent injury. So, we chose to kind of broaden the aspect a little bit of choosing to see all of these patients that come in for any type of violent trauma to intervene with them. The way that intervention works in the hospital is, as a physician, I see them and just to help just kind of coordinate the medical care a little bit. Most importantly for a lot of our adult patients that are admitted to our surgical services to help with the coordination with surgeons, and mostly just help explain to patients their injuries in their management plan. Really the most important component is our designated social worker that sees all these patients and that social worker is a social worker in charge of that patient's social work needs while they're admitted. And then we also have the outreach workers, who are hospital responders, who are really the critical piece of the intervention, who see these patients while they're admitted, they spend time with them while they're here, and actively counsel them against retaliation, and try to get a better sense of the circumstances surrounding why these individuals were injured. And then try to relay that information to some of our community outreach workers to figure out if there's any mediations that need to be at the community level. But most importantly, it gives us a sense of what are the active disputes going on the community that are leading to our patients coming in. And what we know is that at the community level, we've been able to significantly decrease the incidence of the gunshot wounds by about 45% in the neighborhoods that we

have been in the four years since the STV program and in the four years before that. And for our patients, we've been able to improve our rates of clinic follow up for the patients that we have seen, which is a critical piece in terms of long-term care and long-term health of patients being inherited to their medical care. And they're also 0.4 times less likely to come back with a re-injury if we see them. So, these are all pieces that are critically important for us to be able to continue to do our work. Unfortunately, over the past year there has been a significant increase in the amount of violent trauma that we are seeing. The violence continues to be relentless. We've had 145% increase in the number of gunshot wound victims that we are seeing here in our hospital compared to 10 years prior. This is by far been the most violent year that I have ever seen in my, in my time here at Jacobi. The number of gunshot wounds just come by every single day, and we've noticed this effect ever since the peak of the COVID pandemic. What we know is that at the peak of the COVID pandemic last March, April, and May, our numbers were significantly decreased in terms of violent trauma, primarily because of the lockdown and everything being closed. But the moment the COVID pandemic seemed to get a little bit better around June, July, and August of last summer, is when we saw the significant increase in violent trauma, significantly uptrend and it has continued, unfortunately, for the rest of the calendar year and onto this spring as well.

MANDEL-RICCI:

I can't even imagine, in your position, how upsetting it must be, for many, many reasons, to see this increase in violence. Do you feel like, because of the work and the incredible partnership with the community, you've been in a better position to understand and address it, even though it's happening?

ROMO:

For sure, I mean, yes and no. I mean, we definitely have the infrastructure in place, but it's so overwhelming. One of our outreach workers made a statement saying people expect us to be superheroes in our communities, they're getting called by people saying what's going on? How are you going to stop this violence? But there's so much of it, the sheer volume with it, it's impossible for them to know every conflict, be aware of every shooting. It's also very overwhelming for our staff here, our surgeons, our ER attendings, both pediatrics and adults, our inpatient attendings. Last week, you know, there was a young man who was shot and killed. We were on the trauma bay trying to address the issue, and the moment he was declared one of our trauma surgeons actually paused while everybody was cleaning up and said, can everybody just stop for one second and just acknowledge what just happened here? We lost a 23-year-old young man. We're seeing this every day, the violence has increased. Let's just have a moment of silence to acknowledge the life that lost. I think for a lot of us, that was a way to just make us recalibrate a bit to the magnitude of what we're seeing. I think as you can imagine, the more and more you see something, it just becomes part of the norm and we become used to it. We should never ever have to get used to seeing young men and women die from a preventable cause. But I think there are a lot of factors that are contributing here that go beyond just, you know, issues around interpersonal violence or conflicts, even at the neighborhood level or at the individual level. The social economic issues that existed in places like the Bronx before the COVID pandemic were just further exacerbated by the COVID pandemic, as the Bronx was disproportionately hit with COVID. I think all of that is things that are beyond the control of our program, beyond the control of our hospital, and we're unfortunately dealing with these ramifications of the COVID pandemic, that we don't talk about enough of the long-term consequences that this is having on our communities.

MANDEL-RICCI:

So, both of you work in the Bronx, and for all the reasons that you just eloquently put, Dr. Romo, you all are seeing, day in and day out, the impacts of firearm injuries and violence. And I would characterize both of you, and I think you would characterize yourselves, as activists in this area. Health care providers have a unique voice and a voice of authority in this issue, and I'm wondering if you have a message or a call to action even for your fellow health care providers. What actions can they take to address this really complex set of issues?

SILVER:

I think, really, that this is a public health crisis, and we as physicians are in a place where we address whatever public health crisis that we are confronted with. There's no greater example than the recent one of the COVID pandemic that's all hands on deck. Unfortunately, this one is not one that's going away or simmering down after a year. This is something that has been ongoing. Rates of gun violence have not changed in the United States since the 1990s. They've been relatively steady as compared to declines in other types of injury like motor vehicle injuries and deaths. And so, I would just ask other physicians and clinicians to just do something. And so, we all like to do things in different ways and have different areas of interest. I would like to motivate people to figure out which area they like to be involved in, whether it's doing things from the advocacy perspective, educating others on it, making this day-to-day practice in their clinical work, or contributing to research in this field. Not everybody is going to be able to do all of those things, but picking something and picking at least one thing to do, or one patient, at least those who are in high-risk situations to address firearm injury prevention with. We need to kind of keep this in our mind regardless of what kind of practice you're in and what your role is in health care.

ROMO:

Yeah, I think gun violence and its effect on our pediatric population, both in terms of physical and mental health, is a prime example of how we as physicians need to broaden our scope in terms of how we view and treat disease and illness. And how we go beyond just the confines of the hospital and of the clinical setting, acutely, to figure out creative and innovative ways to treat diseases that affect our patients both at the Community and at the hospital level. And not just deal with things as they happen as they present to us, but try to think a little bit more broadly, about both distal and proximal causes of disease, and use our voice because our children are dying, frankly, as Dr. Silver said. More kids die from gun violence related disease than do from cancer, and we need to just acknowledge that fact, and that's not a political statement, that's a fact. That is a medical fact in terms of mortality. And it doesn't matter what side of the aisle you are on. I would like to think that we all want to act in the best interest of our children. We all want to keep our children safe. I think every child in this country should have the right to be able to walk down the street to the park without their parents fearing for their kid’s life. Are they're going to be hit by a stray bullet? And I think it's important that we acknowledge that as physicians, what matters to us and ultimately just focus on the safety and health of all of our children.

SILVER:

We have mostly been focusing on the direct effects of gun violence, but certainly in pediatrics, one of the things that is gaining a little bit more attention is the fact that we focus a lot on identifying adverse childhood experiences, and how that can increase toxic stress, and affect various areas of their growth and development. And so, gun violence independently is being identified as an independent adverse childhood experience, and so what we have found in our patient population at Montefiore, we're not a trauma center, so we have a slightly different kind of experience with our patients. But we surveyed our families and over 60% of parents report that they hear gunshots in their neighborhood. That alone affects the children in those households by growing up in an environment where they're being exposed to that kind of violence, even if not directly. And when you think about that, like Dr. Romo was saying, parents don't want their children to be hit by a stray bullet walking down the street. It also affects the way that parents let their children go outside, right? So, we have this increasing epidemic of obesity in our pediatric population, and I've talked to parents when we talk about going outside and getting exercise and going the playground. Some don't want to because they're afraid of the potential of their child being shot, and when that happens it's hard to have an answer to that. I think that there are more effects than just the direct effects of being a gunshot victim, but the secondary downstream effects are significant as well.

ROMO:

I would also just add to that. I mean, we're seeing a significant amount of psychiatric comorbidities in our patients who are victimized by violent trauma. Close to 40% of our patients have active symptoms of post-traumatic stress disorder and acute stress disorder on admission. There's also a lot of undiagnosed depression and anxiety that goes along with, as Dr. Silver mentioned, this kind of chronic stress environment and these additive effects of having these adverse childhood events that happen in these patients, especially now post COVID, we've had a significant increase, I'm sure also in Montefiore, as you have here, of increased rates coming in with suicidal ideations and significant suicidal attempts since the COVID pandemic. And again, it is one of those other things that has been exacerbated by the COVID pandemic and with the additive effect of a lot of the violent trauma that these patients are witnessing, and hearing, and seeing.

MANDEL-RICCI:

Thank you so much for bringing that up and I would also posit that the health care workforce itself are victims. Because Dr. Romo you are describing very eloquently before, what a toll that this last weekend has taken on you and your colleagues and not being able to save the lives of very young people that should have much longer lives in front of them, and witnessing, and not being able to do what you want to do, which is to help people. When you think about this work and this work right now, what gives you hope?

SILVER:

Since I've started doing this work in this area a few years ago, I mean I can remember, I think, Dr. Romo and I started doing workshops on this four or five years ago. When we first started, we were in the minority of people at these academic conferences talking about this topic and we always sadly reported there's no federal funding and hard to get anyone to do research on this topic. And there's been a big increase in all of

those things over the past few years, so it gives me hope that more people are getting involved in doing research on this topic. There are not tons of funds available for doing this kind of work, but it is more than when we started four or five years ago. It's slow going, but I think there is hope.

MANDEL-RICCI:

Thank you. Dr. Romo, what is giving you hope these days?

ROMO:

There is an increased interest, as Dr. Silver said, both at the state, the local, and the national level to try to bring this to the forefront and try to better understand why it is that certain communities are predisposed to this violence. And it's not just mass shootings that usually get more attention in the media. 98% of shootings that happen in this country happened in incidents when less than four people get shot. And unfortunately, 98% of those incidents happen in communities of color in inner cities throughout the United States. And I think as those facts come to a head, I think that gives me hope that as a community, we will come together and try to address these issues. As physicians, we are trying to see the importance of programs like this, and interventions, and trying to do our part. And I think, most importantly, the patients give us hope. There was one patient who I was asking about retaliation and reinjuring, and I was counseling him on there with our outreach worker and I asked him if he was having thoughts of retaliating against the person that shot him. And he said, you know, I thought about it at first, but now I'm not going to because I would be disrespecting the blessing. I said, well, what do you mean by that? He said, well, if I take somebody else's life away after mines was spared, then I'm disrespecting the blessing I was given of giving another chance. So, I'm not going to do that. So that gives me hope. That you can actually change somebody's mindset by just asking a question and having the right person talk to them. And how many shootings does that prevent? We're never going to know, but I think, slowly, slowly, mindsets will change, slowly communities will change, and we'll hopefully get to a better place where children no longer have to fear for their lives in their own communities.

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BASTINELLI:

Thank you for joining us today. Until next time, this has been *Perspectives*.