Welcome to The Spark: Medical education for curious minds. We present the people and stories behind medical advances at UCSF, from medical students to physicians and faculty in the School of Medicine. Through The Spark, we share the innovations at UCSF that are helping bring more equitable and better care to our communities. I'm Tessnim Ahmad, a student in the School of Medicine. In this episode, we turn our attention to gun violence. Gun violence is one of the biggest health and policy epidemics gripping the country right now. In 2017, nearly 40,000 people died from guns. Perhaps more surprising, in the United States of America, firearms are the second leading cause of death for children. Suicide accounts for the majority of gun deaths, followed by homicides, including mass shootings.

While suicide is complex and a product of a myriad of psychosocial and biological factors, firearms are associated with higher suicide completion rate, and studies have shown that the presence of a gun in the home increases the risk of suicide for all members of that household. In terms of mass shootings, they've become more common and deadlier in recent years. The shooting in Las Vegas in 2017 was the deadliest mass shooting in US history, killing 58, and last year was the worst on record for school shootings. The US stands out compared to other wealthy nations. Kids in the US are 36 times more likely to be killed by guns compared to kids in other high income countries, and there are substantial disparities by race and socioeconomic status, with African Americans especially likely to be affected.

Medical professionals have defined an important space within the firearm policy debate. After a call from the NRA for health providers to "stay in their lane" with regards to gun violence, doctors started the This Is Our Lane Twitter campaign to document the ways in which the issue was squarely within their purview. As a member of the advisory board for Scrubs Addressing the Firearm Epidemic, or SAFE, Dr. Jahang Fahimi believes the medical community has a responsibility to act. SAFE asserts that guns deserve the same urgency and attention from medical professionals as other health risks, such as cigarette smoking. Dr. Fahimi is also an Associate Professor of Emergency Medicine at UCSF. He trained a Highland hospital in Oakland, a busy trauma center that sees more than its fair share of gunshot victims. He's authored publications on the health implications of gun violence, and serves as a local and national expert on the issue.

Daniela Cordero and Mary Turocy are two students who have worked with Dr. Fahimi in SAFE. They are third year medical who organize the UCSF White Coats Against Gun Violence Week of Action in the wake of the Parkland shooting, later merging their efforts with SAFE. Daniela is an alumnus of Marjory Stoneman Douglas High School in Parkland, Florida, and she's passionate about using medical education to provide students with the tools to reduce gun violence and promote health equity. Mary is interested in public health and family and community medicine. She believes she has a responsibility as a medical student to advocate for safer and healthier communities. I sat down with the three of them to talk about their advocacy. Can you share your background or experiences that pushed you to get involved in this issue?

Daniela Cordero:
My interest in gun violence specifically was a little unexpected. So, I actually went to Marjory Stoneman Douglas High School, and much of my interest in the movement came after the shooting. And I think it's
probably important to say that it was not immediately my reaction to it. My immediate reaction in the wake of the shooting was actually to feel pretty paralyzed and hopeless, because it's a conversation that's been going on for a long time and there hasn't been much change. But then I saw the students, the current students at Douglas stand up and fight back, and people started listening, and there felt like there was a lot of momentum. And I think, looking at them, it felt like I had a responsibility to do something about it, and that being in medical school, there was a really specific role that we could play, and a way that we could make a difference in a meaningful way. So I kind of came to it after a tragedy.

Mary Turocy:
I would say I've always had just emotional reactions to incidents of gun violence in the news, ever since I was pretty young. And after coming to UCSF, I saw a lot of my classmates advocating for different social issues, and then after the Parkland shooting happened, it just was like a coming together of me working with Daniela and settling that this was an issue that I was really passionate about and I wanted to advocate for, because it just struck such an emotional chord with me.

Tessnim Ahmad:
Dr. Fahimi, you trained in a major trauma center. I imagine you saw more gun violence in your training than most providers will see in a lifetime. Can you share what made you want to step beyond treating gunshot wounds and to start advocating more broadly?

Dr. Jahan Fahimi:
I always say that my path to working on this particular issue is a little bit ironic, because I did do my training and I worked as a faculty member in Oakland for a long time in the emergency department there. And seeing victims of gun violence was almost an every single day occurrence, but it also was this emotional response to mass shootings, and in my case, Sandy Hook. That kind of captured my attention in a way that made me step outside of my day to day routine and realize that this is an epidemic that I want to focus some of my professional career on. And then of course, realizing I have some personal and professional experience, and I have some authority to actually weigh in on the issue. And I feel like a lot of my colleagues and I turned a corner right around Sandy Hook and began to work on this issue from an advocacy and from a research standpoint.

Tessnim Ahmad:
Now, on these same lines, you're on the board for Scrubs Addressing the Firearm Epidemic, or SAFE. Can you tell us about SAFE's mission, and how it sees its role within the gun violence policy and advocacy realms?

Dr. Jahan Fahimi:
SAFE is a really interesting organization because I think it coalesced so quickly in response to episodes of mass violence. And it really has three major objectives. One is to educate providers, and that's at every level, providing resources for practicing physicians and providers, as well as partnering and working through the formal governance organizations, like the ACGME and LCME, to address education at the medical student and resident levels. They also try and advocate for better research on firearms violence. In that, they've partnered with AFFIRM, which is a research organization that has recently been started and is a really wonderful organization, and I highly recommend everybody check them out, and, if they have the means, to donate to them. And then, they support evidence-based policy changes, the third mission there. And some of the ones that... And you can look on the website, there's a whole list of
them with links and resources to them, things like universal background checks, making sure that there's appropriate screening for people who maybe shouldn't have access to firearms, and then mandatory reporting of lost or stolen firearms. Things that I think are fairly common sense that are not necessarily implemented everywhere.

Tessnim Ahmad:
And Mary and Daniela, you've described an urge to advocate after witnessing acts of gun violence. And it sounds like you recognize your unique roles as medical students and your authority as future healthcare providers to affect change. Can you share the projects you've worked on, both within and outside SAFE, to advocate on gun violence.

Mary Turocy:
Right after the Parkland shooting, we started just with pulling everybody in the UCSF community together to take a photo with a banner that said, "Gun violence is a public health issue." The issue gets so politicized, but you can really look at it through injury prevention, statistics, and data, and so much of the research is missing because there hasn't been funding for it. So just using our voices as medical students to demonstrate that angle on the issue right after the crisis. And then we pulled together a Week of Action on gun violence that had some panels with some expert speakers. We had a workshop where we talked about how to talk to patients about firearms, patients who might be at risk of committing suicide, or patients who might be at risk of interpersonal violence and how to bring up how firearms might play a role in their health and safety.

Daniela Cordero:
A lot of what we did in the immediate wake of the Parkland shooting was just trying to capitalize momentum and bring people together. And I think one thing we wanted to do was just start a conversation. And I think an important lesson too, is that we didn't actually need to be experts on it in order to get people together and passionate about the issue. We knew that it was a problem. We knew that we wanted to learn about it, and as students, we were willing to coordinate the education that we wish that we had. And so, a lot of what we were trying to do was model, for the School of Medicine, for other healthcare professions, that this is something that's important to all healthcare providers. We're not learning it sufficiently in our curriculum, but we have the experts here.

Daniela Cordero:
We have Dr. Fahimi, we have other doctors at UCSF who are fighting for reducing gun violence, and we can bring them together and really learn how to best prevent gun violence, how to best counsel our patients on it, how to best advocate it on the legislative level, how we can begin to think about tackling such a large public health issue. And a lot of what we were doing was just trying to gather people together in those early days. And then, when we heard about SAFE getting started out of Stanford, we definitely wanted to merge the efforts that we had put together, and obviously chose Dr. Fahimi, because he had been on the SAFE advisory board, was here at UCSF, and had been very much involved in all of the action that we had in the unofficial advocacy that we had in the wake of the shooting. So it felt like the natural progression of events.

Tessnim Ahmad:
As I hear you describe your outreach, I'm interested to hear what kind of responses you've had, as we know gun violence is one of the most divisive and politically charged policy issues.
Mary Turocy:
I think, actually, when we started transitioning towards more longterm projects we tried to bring in more students on board, especially as Daniela and I started clinical rotation. And the five first years who came on board all had really different perspectives on guns. People who had come from families where there are a lot of people in the military, and people who came from areas where lots of people own guns. And I think that's added a lot of depth into the conversations that we've had and the projects that we've worked on. And we're really excited to have them adding to the conversation. And I think our classmates are so eager to learn about it, really echoing what Daniela said about this is an area where we feel like we need education, and we're trying to create the education that we want to have around guns and how to talk to patients about them.

Tessnim Ahmad:
Now, discussions around gun violence policy are complex. Dr. Fahimi, can you share some of the major controversies around gun violence to orient our listeners, of course, understanding we won't be able to cover it all in this segment?

Dr. Jahan Fahimi:
Fundamentally, one of the biggest issues that you'll hear, whether you're following people who are advocates for the NRA versus people who are advocating for common sense gun laws, and background checks, and those kinds of things is that everybody has an emotional response to how they perceive gun laws. And I think that there's a fundamental difference. I think everybody agrees that we want to reduce deaths from firearms. We want to reduce the negative impacts of violence in our communities. I don't think anybody argues for more violence. It's just that we completely differ on how we think legislation and policies will impact that. The perfect example is gun free zones, right? You'll have people who advocate that reducing access to firearms in certain areas will reduce the number of people who could get shot. But then you have proponents of Second Amendment rights that will say that defensive use of guns actually is how you can protect yourself.

Dr. Jahan Fahimi:
And so, we don't have good evidence in either direction to prove one thing or another. The only area where we have probably reasonable evidence is that safe storage of guns reduces accidental injuries, among children in particular. And that's why I think you do see people like the American Academy of Pediatrics and others really advocating for safe storage policies and those kinds of things. But in terms of broader laws, I don't think we have consensus. It gets to the fact that we need research to be able to understand these things, and that research is not easy to do. And it's especially hard to do because there is no funding for that research. Since 1996, there's been a quote-unquote ban on this research due to the Dickey Amendment that was introduced in Congress and has been basically renewed every single year.

Dr. Jahan Fahimi:
So, no federal funds are being thrown at the issue, and so, for the foreseeable future, I don't think we're going to have definitive answers about what types of policies would drive the decrease in that violence that we'd like to see. I can say that in California, we have some of them more restrictive firearms laws. For example, in California, even sales of firearms at gun shows have to go through a registered dealer, so that there can be the appropriate checks and balances applied, and that's unique to California.
also has the Gun Violence Restraining Order, where firearms can be taken away from people who are a
danger to themselves or others.

Dr. Jahan Fahimi:
So in California, we have a model for how we can be a little bit more aggressive about restricting firearm
use and ensuring that the transfer of firearms is done in a way that is traceable. But again, you can't
compare California to another state and make inference about whether or not those gun laws are the
driver of that. There's just so many other factors to be considering. And so, I guess it's a long winded
way of saying policies are going to differ by location, and very reasonable people on both sides of the
issue are going to differ and how they perceive the efficacy of those laws.

Tessnim Ahmad:
As I listen to you describe your experiences and the incredible work you're already doing, I'd love to hear
how you feel your advocacy on gun violence has shaped your perspectives of student doctors, and if
advocacy on gun violence or other issues of health equity will have a place in your future careers.

Daniela Cordero:
Advocacy will definitely have a place in my future. And I think for me, this issue is a symptom of a
broader issue. And I think that gun violence is an issue of health equity, and I can't see a world in which I
become a physician and don't see promoting health equity and trying to create both health care and
health outcome equity as a central part of my career. I think what it has taught me, specifically with gun
violence and with this advocacy in my undergraduate medical education, is that there will always be a
way in which you can make a difference.

Daniela Cordero:
And I think one of the hardest parts is figuring out what is your sphere of influence and how you can
best leverage your current role in order to make a difference, and I think that will be a constantly
moving target over my career. So I think it will be figuring out who are the patients that I end up treating
based on the specialty I go into, what are the problems that they're facing, and then what can I do about
it. And trying to match those things up will be a constant battle. And I think gun violence is always going
to be something I care about, and it's not going to be the only thing.

Mary Turocy:
Yeah, I think exactly like Daniela said. I do absolutely consider myself an activist, and I think gun
violence, a lot of the root causes are fundamental issues of inequities in our society. And I think as
doctors, we can address all sorts of different root causes and effects and everything in between. I'm
really interested in family medicine, and I think gun violence affects families and communities, not just a
single victim, but their parents, their siblings, their neighbors, and the entire community. And I think
whatever I do in family medicine, I'll definitely be looking at health issues that affect families and
communities, and trying to use my knowledge about health and passion to make the world a better
place to weigh in on things, no matter what they are.

Tessnim Ahmad:
Now, before we close, do you have any advice for fellow medical students, doctors, or community
members who may be emotionally wrought by violence in our communities, but are unsure how to
advocate, and who even wonder whether or not their actions would make a difference?
Dr. Jahan Fahimi:
Fundamentally, at least for students and for residents and for attending physicians, for healthcare professionals along the entire spectrum, I think what you're hearing from Daniela and Mary is that you don't need to be... You make yourself an expert by being interested in this topic. You become an advocate because you have an interest, and you organize, and you commit yourself to learning about the issue. And that's what they've done here at UCSF, and have galvanized a following behind them. And my own arrival at this topic, it's not like I did any particular training or anything to become someone who wants to advocate for improving the lives of people affected by violence. You just make it your thing. My advice is find whatever that thing is that you're passionate about, and just commit yourself to becoming the expert. And you can always learn from other people around you, and soon you find yourself in a position where you're being interviewed in a podcast about it as a quote-unquote expert.

Mary Turocy:
Yeah. I think it all boils down to not being afraid to ask the right questions. We just reached out to so many different people within and outside of UCSF. And I think just being curious, and passionate, and willing to step out of your comfort zone a little bit to ask people to share their expertise, to ask our classmates to get involved and step up, and was blown away by the really positive response we got.

Daniela Cordero:
I mean, I would echo everything that's been said, and to not be repetitive, I think the only additional advice I would have, and this is specific to medical students because it's the perspective I'm most familiar with, would be, I think it's really easy when you get into medical school to equate, "I'm not qualified to provide patient care," which you're not for a long time, and that's something that we learn as we go along, with, "I'm not qualified to make a difference." And that's not true. So I think for students, not to forget that those are not the same thing.

Tessnim Ahmad:
Gun violence is a big issue, but the best and brightest minds are on it. We thank Dr. Fahimi, Daniela Cordero, and Mary Turocy for their work and for taking the time to speak with us. Many of the data shared in this podcast are from the Everytown for Gun Safety Support Fund, a nonprofit seeking to understand and reduce gun violence. Visit everytownresearch.org. We mentioned a study on firearm ownership and suicide rates. It was published in 2016 in the American Journal of Public Health by doctors Michael Siegel and Emily Rothman, from the Boston University School of Public Health. To our listeners, thanks so much for tuning in. We look forward to having you next time.