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TRANSCRIPT - GR 09 13 24 "Global Health Equity" MB, BCh, MD, MPH, DTM&H from Harvard Medical School, Global Health and Social Medicine

Internal Medicine Grand Rounds

Welcome, everybody in person. Welcome those of you who are on zoom we got a really special event today. My name is Justin Mutter. I'm a geriatrician in our department of medicine, but I also have the pleasure of working with the center for health humanities and ethics which is co-sponsoring this event and this has really just been a great, actually triple, tripartite sponsoring. We have our medical center hour for from the Center for health humanities and ethics.

- We have the great team from the center for global Health equity.
- And we also have medical, grand rounds. So want to thank all the people that have been involved in putting this together. Some of you may have been able to come to Dr. Iver's talk yesterday, which was phenomenalbut want to thank Scott Heisto. I want to thank April Ballard from the
- Center for Global Health Equity. I want to thank Charlene Kaufman from our center for health, humanities and ethics, Tony Brinkman and and all the chiefs from medical grand rounds for helping us get this all together. I am going to very briefly, very quickly, review the new Cme guidelines, which are are a little more complicated, and they're new.
- If anything is at all confusing for those of you who want to claim cme for today's
 participation. There are posters in the back that you can like snap a photo on your
 way out. There's also information on our handouts that are in the back. But I'm just
 gonna go through this super quickly. So forgive me. But maybe if I can use this
 because it's not yeah. Just click. Yeah, try.
- There you go. Okay quickly. Going through this as as many of you know who were here last week for medical ground grand rounds. There are multiple ways that you can claim your Cme. At this point. You can record your attendance through a text. You can also record your attendance on the online version, and the codes are right here, as you see for those of you on Zoom probably see that a little easier. But again, that information is on the handout and also on the posters in the back, for those of you who are with us in the room today so without further ado, I'd like to just dive right into our really important topic for today social medicine might be the most critical and yet paradoxically undervalued and least understood concept in medicine and public health. Today I spent some time trying to figure out how many departments and academic centers, both the United States and globally, have the title Social medicine in them. And it's actually just a handful.
- So really important, and yet doesn't always rise to the top of our conscious work.
- It's a discipline, though, that boasts nearly 2 centuries wide, of wide-ranging bibliographies, major contributors. But social medicine is perhaps deceptively simple.

- As physician and medical historian. George Rosen wrote in 1,947 social medicine emphasizes, quote that nowhere does human disease occur as pure nature.
- Instead, it is ever mediated and modified by social activity and the cultural environment which such activity creates.
- I can think of no more. No one more qualified to help us understand the legacy and future of social medicine in our global context than our distinguished speaker today.
- Not only is she a professor of social medicine among many other things, more importantly, she is a practitioner of social medicine.
- Dr. Louise Ivers has many, many titles and accolades which I won't list for you here, but invite you to review and her biography, but she would be the 1st to tell you that it is her daily practice of global social medicine attending to illness in its deeply personal and social context that informs and illuminates what she has to teach us today.
- But please join me in welcoming Dr. Louise Ivers, our distinguished speaker to Medical Grand rounds and the Medical Center hour.
- Hi, everyone! Thank you so much for that lovely introduction. Thanks for welcoming me to Uva. For the last 2 days I've been having a really great visit.
- I wanted to talk with you today and share a bit from my experiences as an infectious diseases doctor for more than 20 years now working to respond to infectious diseases, different epidemics both at home in my home State of Massachusetts, also, in places like Haiti, where I've worked for more than 20 years in Uganda, where I've worked for a number of years and to talk with you a bit about how I see structural violence and biomedical reductionism as big challenges for the future and how perhaps global social medicine is an antidote for that I wanted to dedicate my talk today to Dr. Paul. Farmer
- Paul Farmer visited Uva. Very often, I would say he was a big fan and friend of Uva. He spoke at the Center for Global Health Equity as recently as 2,020.
- Paul was my boss, my department chair, my division chief, my doctoral thesis
 advisor and he was unapologetically committed to providing health care services to
 the poorest people and he taught me so much. And he taught me really to listen to
 communities, to live with communities and so much of what I've I'm talking about
 today is inspired by Paul. I'll reference him periodically.
- This picture here was taken in 2,016 during a cholera surge in the southwest of Haiti after hurricane hurricane. Matthew and a team of Haitian healthcare workers are diligently trying to respond to the surge of cholera and I don't usually show photographs like this.
- They don't bring the fullest dignity of our patients to the conversation. They risk
 either alienating some people or offending some people, or even being a kind of
 disaster fascination picture, which is not my intent. But I think, just as I might bring a
 photograph of a wound that I'm seriously trying to address to my peers and my
 colleagues and ask for their input.
- I think in this forum it's appropriate to show this picture, so we can really try to grapple with the reality of what is happening in our world whether that's 2,016 or 2,024, because the picture was taken in 2,016, but it could have been just yesterday, because there's still a major cholera epidemic happening in Haiti, and you can see in this picture.
- It's a makeshift kind of a place.
- There's not a filter on the picture. The light was poor. It's kind of green tinged, because the roofing is made out of green plastic.

- The adult I'm speaking to is the child of the patient, and he was actually sweeping the floor when I was rounding because there weren't enough staff.
- My patients has a cot with a hole in us to capture the diarrhea, so it falls into a bucket underneath him and you can see his feet our broad.
- They're calloused they're thickened.
- They've spent a lifetime without shoes. And this is the reality.
- However, for more than a hundred years we have known how to prevent cholera and for more than 50 years we have known how to treat cholera.
- For more than 2 decades. We've had vaccines where they're which are pretty decent for cholera.
- But here we all still have still are and we just don't really have what Paul Farmer
 often described as the staff stuff, space and systems to provide the care that we
 know is possible to provide. And somehow this appears to be ordinary in our world
 but there is very much something that we can do about it, and we must.
- So I propose to you that this is a patient potentially, while dying of cholera, maybe actually dying of inequality.
- If we look a the leading causes of death globally, this figure is from just before the covid pandemic but has more or less stayed. True.
- globally, non infectious diseases are really emerging as important leading reasons for death globally. And there is a lot we need to do on those 2 infectious diseases overall have been reducing, which is great. This is because of biomedical discoveries and diagnostics and that's good news.
- But the story is a little bit more nuanced, because if you look specifically at low income countries in the burden of disease, infectious diseases are still 5 of the top 10 causes of death globally in low-income countries and actually the number one killer. Neonatal conditions also includes in many cases infections and sepsis. And so we have a situation where 2% of deaths in the United States are from infections.
- But, for example, 17% of deaths in South Africa are from infectious diseases.
- So if we look at this just visually, a slightly different way in this figure on the left, high income countries on the right, low income countries, the conditions in pink and red and orange are infectious diseases maternal mortality, and neonatal conditions, and these are things that we have managed to address in high income countries.
- But for some reason we are not in low-income countries.
- So I would say this, then, is really just actually a failure to deliver because we know what to do.
- We do it in some places but we haven't been doing it in others and in 2,015 the
 World Bank and the World Health Organization wrote about universal health
 coverage, the notion that all people should have access to the full range of quality
 health services they need when and where they need them without financial
 hardship.
- And this Uhc was adopted as part of the notion to reach those sustainable development goals.
- And yes, 2 billion people are facing catastrophic or impoverishing health spending and millions and millions of people do not have access to the most basic health services.
- So I want to talk about structural violence.
- And this paper was written in the sixties by Johann Galton, a Peace Studies researcher.

- And it's a really very interesting paper to read. I. I do highly recommend it. He brings
 a definition of violence. He talks about peace as an absence of violence and he
 defines violence as being, when human beings are being influenced so that their
 actual somatic and mental realizations are below their potential realizations.
- So when the potential is higher than the actual then violence is present and importantly this should be avoidable.
- He further, in the paper, describes direct violence, which is probably the violence we're more used to thinking in daily language, where there is a an actor that commits an act, and it can be more obvious to see and observe.
- But he describes indirect violence where the it is less clear who is undertaking the violence? Who is the actor, or what is the actor, and describes this as structural violence, indirect violence, structural violence as a social injustice.
- This kind of violence doesn't always automatically help us see who is the actor, but it's built into our structures.
- It shows up as unequal power and consequently on equal life chances.
- What's very important in trying to think about this is that he highlights that these structures may seem very ordinary.
- They they seem ordinary in our understanding of the world, so perhaps we should question them a little more, but they may seem ordinary, and the object of structural violence may have been persuaded not to perceive the structural violence at all.
- Paul Farmer elevated and amplified conversations about structural violence and medicine. Quite a lot in his work.
- He talked about structural violence as a way in which social arrangements.
- environmental forces limited to the effectiveness of our treatment. And he really
 popularized, I would say the notion there are in the popular dialogues of medicine
 and social medicine. There are critiques of the construct, you know. Some would
 argue with this definition of violence. Some would argue that it is inappropriate to
 call it indirect. But actually, we should focus on who are the actors that have caused
 these structures. Some describe it as just moralistic storytelling, and others have
 critiqued that structural violence is a term used without enough historical context.
- But for me, you know, standing with my patients a patient dying of cholera, or a
 young child dying of malnutrition or seeing inequality moving between hospitals in
 Boston and hospitals in Haiti. The notion that this was a violent act really resonated
 with me.
- Standing in that room with that patient I feel a distress that I believe, is a response to violence. And so for me, this concept of structural violence has very much resonated, resonated when we think about
- biomedical reductionism. Excuse me.
- It's a term that generally speaking, or simplistically, thinking is about breaking complex problems down into smaller and smaller units, with the idea that smaller units are easier to address.
- So as an example, Green and Lascalzo in 2,017, wrote a wonderful paper about the limits of reductionism in medicine calling for putting the patient back together again. So this is not an issue exclusive to global health. But I think is very important for global health.
- So they appropriately for my purposes today use the example of tuberculosis.
- So in the 18th century, in tuberculosis was thysis. It was considered very much a social ill in the 19th century. As discovery improved, it was seen more clearly in the

- lungs that progressed to understanding granulomas further as we advanced our medical diagnostics into the molecular basis of disease.
- And yet, despite this strong advancement on the biomedical side, tuberculosis was
 the second leading leading cause of infectious diseases, death in 2,022, and
 there's a huge disparity in who dies from tuberculosis and who doesn't die from
 tuberculosis.
- Although social medicine has been engaged in the management of patient patients
 with tuberculosis. Ostensibly it's been very focused on the individual individual
 behaviour. Has this patient taken their medication? Has this patient been
 incarcerated, and much less on the broader societal factors that are associated with
 tuberculosis. So the biomedical reductionism in tuberculosis has not really brought
 us the equity that we would like to seek. Now, I don't want you know, a
 conversation about the limits of biomedical reductionism to make you think that
- I don't think we should advance our diagnostics and our techniques and our treatments. You know, it's far the opposite. It's quite the opposite. I'm a physician. I see patients. I want the best diagnostics. I want the best treatments. Those are critical. We need more of that. We should do more of that.
- But I think the issue is that historically you know, history would show us that biomedical discovery never just trickles out to the communities that need them the most. So access to diagnostics, therapeutics, preventive care. It's often restricted only to those who can afford it and there is a powerful acceptance of a status quo in which there is extreme and devastating catastrophic poverty and extreme wealth, and it has become an ordinary structure that we don't even always perceive to be a cause of problems.
- Health systems themselves don't often don't have the capacity. There are major health workforce gaps.
- Health facilities tend to be over centralized and affected communities are insufficiently represented in decision making. And this is a state. These statements, you know, could apply to my healthcare system in Massachusetts.
- They certainly apply. If we think about global health systems.
- One example I want to share is about the and what I call the antibiotic access paradox. So antimicrobial resistance is a major global health security concern. The biggest burden of that is actually in low and middle income countries there is unregulated use of antibiotics in many places, including in the global South.
- And yet in the same places where there is some unregulated use. We cannot find ceftriaxone mirrorpanem to give our patients.
- So the paradox is that in the same places where resistance is worse, we actually
 don't have the treatments that are fairly standard treatments in our hospitals in the
 Us. Or Europe oxygen, a incredibly basic lifesaving treatment intervention. I don't
 have to tell. This audience is shockingly difficult to come by, and the COVID-19
 crisis really highlighted this for many hospitals and health systems in low income
 countries.
- One study in Nigeria showed that only one in 10 children with hypoxemic respiratory failure had access to oxygen at the time they presented to the hospital.
- It's really quite shocking. But oxygen is not exactly a new biomedical discovery and yet patients don't have access to those biomedical discoveries.
- So what I'm trying to argue here is that as I talked about a failure to deliver what we have to think about, too, in global health is that part of the challenge is the structural

- violence and our solution, which is increasingly biomedical is reaching the limits of biomedical reductionism.
- And so we're not meeting the moment we have structural violence, we're responding only with biomedical interventions and we're failing. There's a gap.
- But the thing that offers hope and opportunity is that when we see disparities and outcomes it's an opportunity to intervene. At least we know there's something we can do about it.
- So I think that the opportunity to intervene.
- It's where global social medicine comes in where social medicine is our opportunity to think about the larger societal forces that are influencing our ability for our patients to have the outcomes that we want.
- I want to turn back a bit to the case of cholera again. So cholera is a bacterial infection.
- There are millions of cases of cholera every year around the world. It's vastly underreported, in part because of lack of diagnostics, but also because of stigma and other issues, laboratory capacities.
- 20,000 to 140,000 people are reported to die every year of cholera, but the World Health Organization has said it could be as many as 10 times that amount, we actually are not totally sure the fatality rates are really variable from 0% to 50%.
- But every time you see an illness with a massively variable outcome. You have to wonder why that would be the case.
- I won't spend a lot of time on the molecular, you know. Microbiological aspects of this. But importantly, for cholera, there is an environmental aquatic component of its life cycle, so that the environment is very important aspect of responding to cholera preventing cholera. Since vibrio cholera can live in water, and if a person drinks unclean water they can have a bacterial diarrheal illness of cholera across the globe. There has been an upsurge in cases of cholera in the last few years in particular, and this has been very, very concerning to those of us who work. In this space there has been an increase in the number of reported outbreaks, an increase in the concurrence of outbreaks in different parts of the world, and there has been cholera in countries like Lebanon and Syria, that had previously had decades without cholera.
- In this figure from the World Health Organization's reporting on cholera. I do want to highlight here that the light blue.
- This graph has colors that can be a little difficult to distinguish, but the light blue colors. On the top of the bars are the Americas, and where I have pointed to highlight. Almost all of those components of the histogram are from Haiti a country of about 11 million people contributing a massive portion of the global cholera burden. And yet you would hardly know it.
- It's hardly reported these days.
- The hatched color is Asia, and a lot of the
- Bar chart there is related to an outbreak in Yemen in Haiti. Cholera outbreak began in 2,010.
- It began as a devastating, very, very large outbreak, one of the world's biggest outbreaks that had ever been recorded recent in recent history and for a couple of years actually between 2020 and 2022, there is, it seemed, to be controlled. There were no cases diagnosed, yet it researched in 2022. Now over a million people in the country have ever had cholera over. Just since 2,010 and 11,000 people have been reported to have died.

- In fact, the United Nations had some culpability in the introduction of cholera to Haiti
 because of a very poorly constructed sanitation system for peacekeepers that came
 from a cholera affected area and the sewage from their living quarters leaked or
 was dumped into water systems that we can discuss if you like a little later.
- Some of our research has shown that even in a country that by many is considered poor Haiti.
- I would call it impoverished. Cholera is a very discerning killer. And this data is just to highlight that the poorest families, even in 2,012, had suffered the most burden of cholera. So 20% of the poorest families had experienced cholera in their household compared to 6% of the wealthiest and almost 2% of households had someone in their family who died in the poorest families compared to the most well off.
- We have done some other research. This is Erin Richterman, who's now faculty at Penn, who worked on this project as my fellow, where we try to understand the risk of food insecurity which is a separate construct to malnutrition. It's related to malnutrition, but food insecurity is when you have an inability to secure food for your family, and we found that severe hunger in the household, severe food. Insecurity was associated with cholera independent of poverty and food, insecure, severe food, insecurity was associated with risk of death from cholera, and we think that the mechanism around. This is related to forced choices. So when you are very insecure in understanding where your next meal will come from, you may have to make choices like eating food that otherwise would not be appropriate to eat or rummaging for food or just buying food instead of soap. For example we've seen that, despite what I showed you was one of the biggest cholera epidemics in modern history. In 2,010 pervasive water, insecurity continues in Haiti for a large variety of reasons, including a failure to actually disperse international development funds that have been promised.
- But as recently as 2,020, only 8% of the Haitian population had improved sources of water available to them on the premises where they live.
- And this is actually not that surprising across the world. Although it's pretty
 egregious, we still have 2 billion people in the world that do not have safe water and
 2.6 billion people that do not have access to safe sanitation and this image is from
 London a century ago, describing the conditions in which cholera was known to be
 fostered, but interventions were made, and sanitation systems and water systems
 were built.
- This project is looking at the recent resurgence of cholera in Haiti in 2,022, and Stanley Jouin is a research fellow in my group who's been working on this.
- We interviewed the 1st 100 cases of cholera that had occurred after a 2 year absence, and plotted them on a map in John Snow style. The red dots are the confirmed cholera cases. The blue dots are water sources that were not treated.
- These are public water sources that actually did not have the appropriate level of chlorine in them when they were tested.
- The white dots, which are actually a bit hard to see, because there's so few are the water sources that are appropriately chlorinated.
- Now, in the context of this outbreak there was a major upsurge of
- violence, gang violence in the country, and the port had been blocked.
- Fuel was unable to get out of the port and the water department reported to us, and the community reported to us that fuel was unavailable for the water trucks. They could not come into this community, and the community was forced to shift where they normally got their water.

- Let's presume they were going to the good water sources and had to move into other water sources so shifting water, source and insecurity of their water was important in the beginning of this outbreak, which has then protracted throughout the rest of the country, and is still ongoing. Today we did some work in 2,019, some qualitative community engagement work to understand the impact of cholera on communities in Haiti, and honestly, every time I reread my own paper I learn something different, and think that I live. If you know, think that there's a theme that I should have brought out more clearly in the analysis. But the community members told us, you know, every time there's a storm. It's just it's on us you know the roads are not very good.
- We don't have a health center.
- They described many things that were completely out of their control to address, and were indirect forms of societal pressures that made whatever interventions happened, unable to help them and save their lives.
- A further ethnography from a student of mine back in 2,016 tried to understand factors beyond the more obvious ones, and raised some very interesting topics like
- the lack of, you know, land tenure system that favored families or women, and many issues that we in public health had probably not necessarily added to the top of our list of things that were impacting communities affected by cholera.
- So if I take this very quick run through cholera and the cholera outbreak in Haiti, I
 think I could have your endorsement of the notion that people dying of cholera in
 Haiti is avoidable is in the context of violence, because at least through Galton's
 definition of violence there is avoidable bodily harm and that it's a result of
 structural violence.
- And so we have biomedical interventions for cholera. We have oral rehydration solution, a very very simple oral therapy with sugars and salt that will help to prevent death from cholera. This graph shows the case fatality rate of cholera over decades, and you can see in the 19 sixties when Ors was invented, the fatality rate dramatically went down. So actually, nobody has to die of cholera and the few cases imported to the United States over the last decade. Nobody has died. It's very treatable.
- And actually, we have some cholera vaccines. This is epidemiology work that I've done in the last 10 years, too, looking at how to bring cholera vaccines to outbreaks. But in Haiti, in 2,010, despite their availability, there was a lot of pushback about using the vaccines in Haiti they were delayed. They were considered too expensive. People thought it would not be possible to do. I mean, we we did do it. And now vaccines are considered to be part of epidemic response. But even the biomedical technologies available were not accessible or not deployed in the way that they needed to be now in 2,011, partly as a response to the Haitian outbreak of cholera. The World Health Assembly called for a revitalization of an entity called the Global Task Force for Cholera Control.
- And I'm very much a fan of the people involved in that work the Gtfcc. I participate in meetings. I'm a member, and I'm very respectful of their endeavors to create in 2,017 a roadmap to end cholera.
- But the public health model of cholera is really focused on tactical interventions.
- Vaccines deliver water and sanitation diagnostics.
- And it's really actually not radical enough in that. It is a relatively sanitized
 conversation about why the structural forces also need to be disrupted. So the
 documents about the model of controlling cholera is not talking about conflict,

- poverty racism, colonialism, other issues that we know are really relevant and important in understanding how the poorest people on the planet can actually get access to water and sanitation.
- And so I think we need to engage a much more. You know, broad notion of social
 medicine in our model for cholera to try to think about. How could we still have a
 patient who's dying of cholera, despite all that we know about it?
- So can social medicine be a path forward here you know social medicine to understand and dismantle the social inequities, the social injustice, the social forces that cause such or that limit our biomedical interventions.
- You know Dorothy Porter has a very nice summary of the history of social medicine
 that I like, and she describes the divergence of Latin, American social medicine that
 was really engaged in the social and structural determinants of health and political
 and social transformation.
- As a contrast to the Anglo American form of social medicine, which was much more focused on individual behavior and focused on the psychosocial behavioral aspects. Wash your hands. Did you take your pill? Individual responsibility so became more of a lifestyle issue versus a life conditions issue. And I would argue that we need to move in a much more radical direction towards the social transformation and political transformation.
- I think it. I find it hard to think that anyone could argue that there are not social determinants of ill health.
- I think everyone agrees on that. And what I observe of the critics and the critiques of social medicine are more about the fact that in our in our systems. Maybe they dilute our technical learning as doctors or nurses like we should be focused on the technical and not on the social that we can't become experts in all of the things. Maybe that social medicine is not our job. I mean clinicians.
- I think as well, though, that there's a really big politicization of language that we
 often use in our conceptual understanding of issues as we try to respond to them
 that have become into the more everyday use, and in everyday use they are
 considered to be somewhat absurd. So when we think carefully about what are we
 talking about structural violence, we may agree or disagree on it, but if the term is
 used too simply or too easily or too quickly in everyday language, it may be very
 unrelatable for some.
- I think also, that some people really do believe that it is necessary to take more individual responsibility for for these issues than collective responsibility.
- Dr. Mutter mentioned my practice.
- I want to very briefly share how in practice, I think we tried to put social medicine into action in Haiti over the last 20 years where I 1st met Dr. Mosher, but over the last 10 years of this outbreak, and that has involved really taking a very, very comprehensive approach to addressing the outbreak finding cases of cholera with community health workers using all of the biomedical interventions at our disposal, pushing the public health community to accept using new ones like vaccines. Those the 1st time ever vaccine was used in a cholera outbreak was with our team in Haiti, but also, instead of just asking people to wash their hands, giving them so instead of just telling them to drink clean water, giving them material the materials they needed to do it.
- But then that's still not enough. So how do we take that practical information, that practical experience, and try to translate it into policy into advocacy? And I think the answer for that part is partnership, because it is true we can't individually each do it

all but we can find partners, and with partners in health, which is called Zamila Sante in Haiti, has had a very long partnership with the Teaching Hospitals at Harvard, with Harvard Medical School, and now at the Harvard Global Health Institute. And so each with our individual roles in access to policy tables or forcing ourselves into the discussions about policy and advocacy, we have tried to take this practical experience and bring it, bring the notion of social medicine to a larger audience.

- So I think in closing social medicine is our business.
- I think we can have at the patient level compassionate inquiry with our patients. I
 think we can work to address the social determinants of ill health by having health
 in all our policies, we can prioritise community health systems and center impacted
 communities in the programs that we run and the decisions that we make we need
 to invest in health systems, not just in individual diseases.
- We need to have health systems strengthening in all of our programs as individuals.
 Even if social medicine is perhaps outside our own grasp. We think because of our area of practice or the constraints we have in our life. We can expect accountability from others.
- We can reject this status quo where structural violence is considered ordinary and we are persuaded that this is not absurd.
- Partnership is so critical, and has been really a foundation of my own career and work.
- Edward Cass was one of the founders of the Infectious Diseases Society of America, and in 1,970, he wrote, it is our responsibility to allocate a sufficient share of our resources and abilities to permit the brain to society of the immediate benefits of what we have learned so dying of inequality is unnecessary and preventable and I think we can be bold.
- We can each individually take action.
- We can change the status quo and we can deliver on health for all with social medicine.
- And that's what I had to say. Thank you.
- Questions, though.
- Hey? Thank you so much. That was very powerful. I. My main question is, how do you see physicians at our level kind of creating that action to spur the people who can more effectively, directly enact those changes. How do we assist in propagating that momentum in this direction?
- Yeah, thanks. I think that's you know, a lot of important movements and shifts come from the ground up and that young people and new generations of students, trainees, physicians force change because they demand change.
- So let's just take 20 years ago there was no such thing as a global Health Residency track or a, you know, Social Medicine Residency program in my ecosystem in Boston, but because of demand from students and trainees those things have been created. I think you know the opportunity we have as clinicians is that we can in our daily practice, do what we can within our limits, and use that experience in engaging with our patients to share realities with our leaders. So how to force leaders to acknowledge the challenges, I think, is a daily practice. I think it's sometimes exhausting, and sometimes one feels like you want to give up because you've been saying the same thing. But I think you know, finding community finding others, finding how to do it with friends who also think the same, and and can challenge your views or help your argument. Refine your argument is the way

- potentially to keep that momentum going related. Note, I'm just curious what additional changes you'd like to see in medical education in the next 10 to 20 years to imbue more people with a sense of social medicine and how to actually practice it.
- Yeah, thanks for that question. Because actually, you know, there was a quote that I was. I didn't read, but it was from one of the former deans of a Us. University. It became a little bit infamous that, above all, the medical profession should abandon the fantasy that physicians can be trained to solve the problems of poverty, food. insecurity, and racism. They have no clinical tools with which to address these issues. This what that was from a Wall Street journal opinion piece in 2020 and if anyone is on social media, it went a little bit viral. But I think you know, I think that's one of the challenges I see is that it can be overwhelming, like the problems of the world. And it's not just obviously the world I mean, they're here in Virginia. They're in Massachusetts. They're in my home country of Ireland. They're they're everywhere. They can seem overwhelming. So I think how to engage with students and graduates. You know, trainees who care about these issues in a way that at least offers them some tools to understand the concerns, and allows them to address the issues within their practice can help, perhaps perhaps balance some of the theoretical with the practical, I mean, I'm certainly a fan of keeping social medicine as an integral part of medical education. I would really disagree with the author of that opinion piece, maybe not surprisingly given the title of of my talk.
- I don't know if that's getting a bit of what you're asking.
- I'd love to ask a question, and I wanna 1st of all, thank you for that amazing talk. And I was struck by the slide about
- what the team has been doing with some of those ante and and partners in health in terms of interventions, and I think one of the things that I think many of us feel and trying to do this work is there's the biomedical reductionism of well, we might say, diagnosis of the problem yesterday, or teaching us about epistemic blinders that we have and this is certainly one aspect of the biomedical reductionism that when we think about an individual disease process, all those small pieces that you were talking about.
- But there's this other biomedical reductionism that you were inferencing. That is, about interventions and therapeutics, and I think we have it in our heads somehow, because of the nature of the strength of the biomedical model.
- That doing social medicine is really hard and it's just too hard. It's in the quote that you read in some ways kind of reflects that but in fact doing biomedical reductionism is really hard. I mean, anybody who's ever worked in a lab or run a lab or try to work on vaccine technology. Anything is really really hard. And so we have this sense that a sort of false dichotomy here? So how do we change that? How do we ourselves as practitioners, but also students, trainees? How do we say, look, all of this is hard.
- It's about how we make the appropriate intervention looking at a problem and all of its fullness.
- Yeah, I mean, I I was hoping, Justin, you were going to tell me how we should how
 we should do that. I do think that I do. I think that part of it is that it is so difficult at
 the moment. In our country, I think, to have dialogues, I think, are, are, generally
 speaking, not specifically just about social medicine. But you know we have
 become very on, trained in how to communicate with each other our differences of
 opinion.

- And so I think, for example, when I was rereading that opinion piece in the Wall Street Journal about social medicine, and saying it was a waste of time, and it was a waste. People should be trained for the pandemics. I just it created just a cycle of people who disagreed talking to themselves and people who agreed, talking to themselves just as an example.
- So is it possible for us to actually engage in good faith about this issue with people in with, you know, on the medicine side, with powerful enough leaders to be able to disrupt our medical systems. So I I don't know what is needed for that.
- But I do take a lot of hope and optimism from the persistence and insistence of a generation of people who are really increasingly engaged in health inequities wanting to make a difference, and really insisting upwards that it's not going to go off the agenda.
- So I think there is a combination of dialogues, but also fostering and supporting the energy and enthusiasm of people who are coming forth to try to find ways as attending doctors, to provide tools for our trainees or residents how to address some of these issues. I know in our hospital in Boston that a lot of the residents are so consumed on a daily basis. We're trying to find a social plan for their patients to be discharged. And it's really, you know, morally injurious, and it is a cause of distress. And so can we at least provide the tools and the resources that are needed to kind of stem that distress, while we also make arguments kind of higher up to leaders about changing our system. I I don't know. It sounds a bit vague, unfortunately, but I don't have a fair and crisp answer.
- Thank you for your talk. You have multiple people in the chat also thanking you. My
 question is in your sort of your work and sort of some of the historical context that
 you've highlighted. You know. I have to imagine that, you know, being the people
 that have lived in that experience of this lack of access to care. Over time. You
 develop mistrust for the health system. And I think we've seen that in our own
 community here in Virginia.
- What have been some of the either pitfalls that you've seen in terms of delivery of the care and helping to rebuild that trust and what? Where? You've seen success as well in in terms of rebuilding trust with the community and the healthcare providers. Yeah, thanks for that question. When I 1st went to Haiti in 2,003 I met Dr. Mutter, who had been there already for a few months in very rural part of Central Haiti and my job had been to try to help the Haitian team scale up antiretroviral treatment for HIV infection. So in 2,003, art was available in the Us. But Haiti had just gotten official access to art, and we wanted to build programs and train. And so you had a part of Central Haiti that had not historically had a lot of trust in healthcare, but it was actually because they had never been provided. Good, reliable healthcare.
- So the doctor wasn't there. The nurse was only there twice a week. There was
 nothing in the pharmacy and so our job that we were tasked with by Paul Farmer,
 who had really listened in the previous decade to the community, was to go out and
 meet them in their home. So my 1st months in Haiti were daily home visits and so
 we would walk for many hours up the mountains to see patients, and along the way
 we would find we would stroll into other people, and they were like.
- Who are you, you know, and we would be like, we're from the Health Center, you
 know. Maybe there was a medical issue that we could pop in to see and we built
 community by going to meet. I mean, it's almost a cliche meeting. People literally

- figures physically where they were but then also giving them the material healthcare that they had not received before.
- We worked a lot with traditional healers in Haiti to distinguish what are the things that you should refer to us, you know, for patients, because traditional medicine is very popular there. So what are the things you can should keep. And when could you refer to us that might need our medicine? We did a lot of listening. But I think those the biggest factor was actually providing treatment. You know, people at that time people were dying of HIV and Tb. As was happening in so many parts of the world, but we knew how to treat it and it was just the idea was, it was too hard to do it there, you know. But it wasn't that hard again. And that was the point we were doing it to show. It. Wasn't that hard?
- And then it did not take long for people to be like, okay, this is a place of healing.
- Let's go to that place. So the mistrust was kind of I. It's not. It wasn't eliminated, but
 it was solved by the actual provision of quality care and demonstrating a
 commitment to the long term delivery of that care. It wasn't just you know, a parish
 user any other questions, just even a comment. I would extend on that doing aids
 since 81 but
- Similarly, that building of trust and my son had built the program through Paul and got support in Palestine and the refugee camps, probably the biggest part of that support of believing again that the system isn't out to get you was training indigenous healthcare workers, people who were part of the community, and they, in a sense, have the equivalent of what we used to call the old paper route.
- They had their group of people, and they would see them every day.
- And these things are doable here. We've done it in in our, you know. I use the
 example because everybody died in Aids and eighties, they all died. And now,
 suddenly, everybody's alive and 95% of the patients in our clinic are undetectable.
 And these are people who have no resources. They're poor. Nobody wanted to
 help them.
- How did that happen by pushing and the political advocacy to get a Ryan White Care Act, and all of these types of things because it does take a community.
- It isn't the Doc shoot. We're the least important people in the clinic. In all honesty, because we've got a legion of case managers. We have social work. We have substance abuse counselors, we get them rides to the clinic. Most importantly, we get them the drugs. They're not paying for it.
- We have people here that get a bonus that is more than the Ryan White Care act in a year and the ridiculous. They say we can't do this well, we did it. It does work. So it is about money. Why is it going back to your original question that only 52% of id fellowship positions are filled?
- Yeah, that comes down to cash. Yeah thank you so much for that and I have a
 picture of the pyramid of our healthcare workforce in Zamel Sante of which the
 doctors are very small number.
- And actually there are no international doctors working in the Sami La Sante program for many, many years for at least 10 years. It is. There are some specialty consultations that happen, but it's entirely led by by Haitians with community health workers being the largest bar on the bottom of that pyramid. So very much. Appreciate the the context of what you're saying. And if you think about, too you know the even during COVID-19, you know, a big advice was, stay home, and you know, but it's like for some people it's materially impossible to do what we as public

- health, are telling them to. Do. You know, there's there's infamous knowledge, attitudes, and practice surveys.
- And I remember one time talk telling Paul I was going to do a cap survey and I
 mean he pulled his one of his books off the shelf, and he brought me to a chapter,
 and he circled like, have you not read my book? You know where he was, you
 know, reminding us that the knowledge and attitudes is not necessarily connected
 to the practice, unless you have the material ability to put into practice what you
 know, and we have seen over the last decade.
- Consistently. Haitians learn very, very quickly, like, Okay, diarrheal illness. Wash our hands, drink clean water, and they tell us, like we don't have soap. We don't have water purification tablets. We don't have a bucket to store our water, so they're lacking in the material supplies. And I think part of the trust as you're talking Dr. Whistle way about providing transportation support and and making sure people can get where they want to. All of that is needed in this part of trust. Because I think if you don't understand, if you're so far removed from your patient's reality wherever you're practicing, they're just going to say like that person just does not understand my reality, and it it forces a disengagement. That otherwise could be an opportunity for engagement.
- Well, thank you, Dr. Ivers. Everybody last round of applause. Thank you for spending this great hour with us. And again, those of you trying to claim credit grab it on the way out. Take a photo of the of the posters back there. Thanks everybody for coming.