IS COMPASSION ESSENTIAL FOR QUALITY HEALTH CARE?

The World Health Organization is actively exploring the role of compassion in quality health care. This Global Health Compassion Rounds (GHCR) highlighted the compelling evidence around compassion and quality care—not only for patients, but also for providers and health care organizations.

Respondents offered their views of the implications of this evidence at national, district, and community levels of care.



The Role of Compassion in Health Service Quality

Shams Syed, Quality Team Lead, World Health Organization

Today we are examining the linkages between quality and compassion. This GHCR explores some of the evidence and experience from Dr. Stephen Trzeciak's work. Importantly, we will look at some of the implications of that work at the national level, sub-national level, and at the point of care.

We believe there is a need for a fundamental shift in how services are delivered across the world to place compassion at the heart of health service reform. Each element of

health service quality—effectiveness, safety, people-centeredness—has important linkages to compassion. Other elements, such as timeliness, equity, integration, and efficiency, also have very strong linkages to compassion.

Of course, these linkages only mean something when it positively affects human lives where services are being provided. This is where our efforts in improving quality of care really need to be strengthened. When refinements are made to services across the world, it is important to place compassion in the policy dialogue, district level organization, and at the facility and community level. The GHCR can help stimulate further refinements among those of us in this work so that necessary action can take place.

Compassionomics: The Revolutionary Scientific Evidence That Caring Makes a Difference

Dr. Stephen Trzeciak, Chair, Cooper University Health Care; Professor & Chief of Medicine, Cooper Medical School of Rowan University

I became convicted of the fact that the most pressing problem of our time is an erosion of compassion. I believe this to be true in society in general. But is it also true in health care? I want to take you on a journey of the evidence that my colleague, Anthony Mazzarelli, and I uncovered in our research for the book Compassionomics. What we found is that compassion can have powerful benefits for patients and for the giver, too.



A couple statements I want to make from the outset: First, I want to assure you that I don't have any magical thinking about compassion. The number one determinant of clinical outcomes is clinical excellence. If you are surgeon who botches a procedure or if you're a physician who prescribes the wrong medication, there is no amount of compassion that is going to undo that.

However, it's not an either/or choice. When our book was released, the *Washington* Post did a story about it, and their tagline was, "Would you rather have a physician who graduated at the top of their med school class **or** who is compassionate?" As if it is an either/or choice. It's not. Clinical excellence **and** compassion yield the best outcomes for patients. Don't take the false choice of an "or." It's "and"—clinical excellence AND compassion.

Secondly, you might be thinking that because I was invited to speak with you today that I am the most compassionate doctor. The truth is, I am a work in progress. But I see it now, and I'm working hard to get better at compassion every day.

I'd like to begin with a story that opened my eyes to a stark reality. On Feb. 27, 2007, on a snow-covered stretch of highway outside Uppsala, Sweden, two buses collided head on. You can imagine what the scene was at the hospital. Tragically, six people died, but miraculously, 56 people were saved. Five years later, researchers asked the question, *What do survivors remember*? Using rigorous qualitative methodology, they interviewed every survivor.



Don't take the false choice of an "or."
Clinical excellence and compassion yield the best outcomes for patients.



The researchers found two common themes. The first was very much expected: the physical pain that survivors felt at the moment of impact. The other theme? A lack of compassion from the caregivers at the hospital. The only thing more striking about this study is when you realize that survivors were taken to multiple different trauma centers, and they all had the same experience.

These data opened my eyes to a stark reality: we are in the midst of a compassion crisis. What is the evidence? A study published in the journal *Health Affairs* surveyed 800 patients and physicians in the U.S., and found that 50% of all respondents believe the American health care system and health care providers are not compassionate. Similar data are available from Europe, as well.

Multiple research studies found that physicians missed 60% to 90% of opportunities to respond to patients with compassion. And that compassion comprises just 0.5% to 1.0% of physicians' statements to patients in a health care encounter. Recent data from the Mayo Clinic showed the median time to interrupting a patient when they are stating their main complaint is 11 seconds. And with interruptions in 11 seconds, I think it's hard to form any kind of compassionate connection with the patient.

In critical care, a Johns Hopkins study found that 74% of interactions between ICU staff and patients or families in the ICU had an absence of compassion. In a particularly striking University of Washington study supported by the National Institutes of Health (NIH), they found that in end-of-life conversations in the ICU, fully one-third of these meetings had no expressions of compassion to the patient or the family.

And in the era of a burnout epidemic, depersonalization (an inability to make a personal connection) is found in more than one-third of health care workers in the U.S. and in the U.K., and they have low compassion satisfaction (little joy from taking care of patients and providing them with compassion). In other words, physicians have fewer meaningful connections with patients.

So based on all these data, and more, I submit to you that we have a compassion crisis in health care.

But here is the big question: Does compassion matter?

Is compassion just part of the art of medicine, or are there evidence-based effects belonging in the science of medicine?

Anthony Mazzarelli and I generated the hypothesis that compassion matters for patients, for patient care, for the quality of care, and for health care providers in meaningful and measurable ways. Through a systematic review, we went through more than 1,000 abstracts and more than 280 original science research papers over a two year period.

First, I want to make sure we are using the same nomenclature. What's the definition of compassion? Most researchers agree that compassion is the emotional response to another person's pain or suffering and the authentic desire to help.



Compassion is slightly different than empathy. Empathy is the feeling, the sensing, the detecting of another person's emotions, resonating with those emotions, and understanding their perspective. Compassion is different; it goes further. Compassion is taking action to relieve someone's pain or suffering in some way.

So, empathy is feeling. Compassion is action. I like to say that empathy + action = compassion.

There are actually neuroscience underpinnings for this distinction. Using functional MRI (fMRI), neuroscience researchers have found that if you have empathy, a part of the

brain lights up that is associated with pain. That is because it actually hurts when you witness someone's pain or suffering ("I feel your pain"). But, when someone takes action to alleviate someone's pain or suffering, another distinct neurostructure lights up on the fMRI. It's an area of the brain that's associated with affiliation and positive action. It's actually a reward center of the brain.

So we like to say that *empathy hurts*, *but compassion heals*. This is very important, because from a patient's perspective, what they feel is the action that we take.

The Evidence

Now I want to go into some data to support the ways in which compassion matters for patients. We first need to take a broader context that relationships matter. A Harvard study found that the most powerful predictor of good health and longevity isn't some biomarker—it's the quality of your relationships.

Similarly, on the other side, we're well aware of the data that loneliness kills. Loneliness is associated with decreased longevity and adverse health effects. So if relationships matter for good health in the broad sense, could our relationships with patients also matter?

What we found is that there is an abundance of evidence that supports that compassion has powerful benefits for patients, patient care, and for those who care for patients, because a human connection confers distinct and powerful benefits.

Physiological effects

Compassion for patients can modulate stress-mediated disease. It can reduce a patient's perception of pain. It can have immune system and endocrine system effects. For example, two randomized controlled trials examined the impact of an extra visit from the anesthesiologist for building rapport and compassion in allaying a person's fears before they undergo surgery. These studies found that the extra visit was associated with higher odds of achieving adequate sedation for surgery. This was compared with the effects of a powerful sedative, pentobarbital. What they found is that the patients with the "special care visit" from the anesthesiologist were calm but not drowsy. In contrast, the patients that received the pentobarbital were drowsy but not calm. And in a follow up study in the New England Journal of Medicine, they found that the patients who received the "special care visit" had decreased opiate pain medication requirements following surgery.

Pain is one of the most complex aspects of medicine. But in laboratory studies of experimentally induced pain, it has been clearly shown that the touch of a trusted other can reduce a person's experience of pain. It doesn't eliminate pain, but it can attenuate one's experience of pain.

This has been shown in controlled settings in the laboratory, but what about clinical settings? More compassion from clinicians has been associated with lower patient pain in not only the post-operative realm, but also in patients with low back pain (which, is the number one reason why people miss work in the U.S.), with abdominal pain associated with irritable bowel syndrome, and with migraine headaches.

There are also immune system effects. Researchers at the University of Wisconsin studied patients with the common cold in a primary care setting. They found that compassion from a health care provider was associated with increased immune response in the patients, as evidenced by interleukins in their nasal lodgings, as well as a 15% decrease in the duration and severity of their cold symptoms.

A study from Thomas Jefferson University in Philadelphia found that in patients with diabetes, compassion from clinicians was associated with 80% higher odds of blood glucose control and 41% lower odds of acute diabetes complications requiring admission to the hospital.

Psychological effects

It might be intuitive in some sense that compassion is important to someone's psychological healing. But studies from the University of Pennsylvania, Duke University, and the University of Colorado have found that in patients with depression, compassion can have a moderate to large effect on the resolution of depression symptoms. Numerous studies have also found that compassion can reduce anxiety and can also decrease the psychological distress associated with somatic disease, like people suffering from cancer.

Self-care is a very important aspect of medicine—it's how patients take care of themselves when they're not in the health care environment or with a health care provider. Numerous students have shown that when you care deeply about patients and they feel that, they are more likely to take their medicine. In a Johns Hopkins University study, researchers asked 1,300 patients with HIV, "Does your health care provider know you as a person?" After adjusting for every factor that could be associated with non-adherence to ARVs, knowing the patient as a person was associated with a 33% higher odds of adherence to ARVs and a 20% higher odds of having no detectable virus in the blood. So knowing the patient as a person resulted in patients with higher self-efficacy—they believed their disease could be controlled.

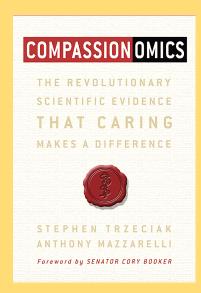
Quality of Care

We also know that compassion for patients is associated with higher quality of care. This can go in two different directions. The first is when the presence of compassion can result in better quality. The second is when an absence of compassion is associated with a lower quality of care.

With the presence of compassion, many studies have shown that patients are more likely to disclose everything that's relevant in their health care information. When we're talking with patients, they're sharing some of their most private matters. They're more likely to tell us exactly what is going on when we're more compassionate.

Research also shows that when you treat patients with compassion, they're more likely to remember what you said. They're more likely to remember their discharge instructions. My personal opinion is that when we don't show patients that we care about them, they're not even listening to what we have to say.

An absence of compassion is seen in what we call "depersonalization," as I mentioned earlier as part of the burnout syndrome. This is an inability to make a personal connection. Depersonalization isn't the opposite of compassion, but with depersonalization, compassion is impossible. Numerous studies from the Mayo Clinic and other centers have found that with depersonalization, more medical errors and surgical errors occur. The most common reason for these errors is cutting corners. Those things aren't necessarily causally related, but there is likely a mechanistic link among them: depersonalization, absence of compassion, and more medical errors.



Effects of Compassion on Health Care Providers

We may have to address this another day, but there is compelling evidence that compassion can be an antidote to burnout through better connections and better relationships with patients. I actually went through this myself when I was struggling with burnout years ago.

Conclusion

I had posed to you a big question: Does compassion really matter?

With 1,000 scientific abstracts and 280 original science research papers behind me, I conclude that compassion matters for health, for health care, and for providers.

I believe that compassion is evidence-based medicine. I call it "compassionomics" because I view it as the convergence of the science and the art of medicine.

And the science is strong.



Compassion is evidence-based medicine.





Activating Compassionate Care at the National Level

Dr. Andrew Likaka, Director of Quality Management & Digital Health, Malawi Ministry of Health and Population

I believe compassion is a new area that has been missed for a long time. I recovered from COVID-19 about two weeks ago. I have been reflecting about how many people are physically reaching our facilities in Malawi but not accessing care. Many of us go to facilities hoping we will get care—we get medications, good doctors, good advice, but how many really access what they went there for?

At the national level, I have been thinking about this subject of compassion—we have been missing the point. In most policies that govern health systems strengthening, compassionate care is marginalized. The Sustainable Development Goals (SDGs) highlight patient-centered care, which is at the heart of quality. But national level guidelines are not clear about the role of compassionate care. **How do we reinforce the role of compassionate care in practice?** That's missing, despite being linked to the SDGs.

A framework for operationalization of compassionate care is missing. And if you want to improve something, you need to measure it. How do we measure compassionate care? How do we say the system is responsive to the real needs of people?

This points to the role of training institutions. When you ask medical students why they went into medicine, the majority say it's because they want to save lives. But what comes after school when we go into practice? Almost the opposite of what drove most of us into the training institutions. So what is the role of training institutions in ensuring that compassionate care is sustainable?

The other aspect I believe we need to think about is the community. With COVID-19, health systems everywhere are stretched. Now you see communities that are not adhering to preventive measures. What is compassionate care if communities are not compassionate towards the providers that are supposed to provide that care? Should we talk about compassionate care only in terms of the giver of the service, rather than the recipient of the service? How do you reinforce the concept of compassionate care so it is understood by patients as well as providers?

It's time that health systems at the national level start asking big questions. Compassionate care can be a key to all that patients are looking for.

Making Things Happen: Health Care at the District Level

Dr. Louis Ako-Egbe, Bangem District Health Manager, Southwest Region, Cameroon

I want to start by answering Dr. Trzeciak's question: Does compassion matter? YES. Emphatically, yes.

To begin, I'd like to explain district health services. Essentially, a district health service translates the national health policies into action at the health facility and community levels. It also supports the formulation of health policies. I'll be talking from two perspectives: as a a district health manager in Cameroon, and also in supporting the Liberian health system at the county level.

The district is where everything in the health care system plays out. The district level creates and aligns all health system interventions with the national policies and goals for quality health care delivery and universal health coverage. In my experience supporting the county level in Liberia during the COVID outbreak, I observed two parallel incidents:

A County Health Officer who led the response team with limited support from the national level had remarkable results in controlling the outbreak. This County Health Officer related with his team in a more socially respectable way beyond just the technical work that they did.

In the same setting, I encountered another County Health Officer. He made a comment that, "At the national level, nobody cares about us at the county level." And this reflected in the work that they did. They were very reluctant to work because of the demotivation.

So how do district health services perceive compassion? First, they expect compassion from the national level. National policymakers need to think about it when they are planning policies and interventions and channeling resources. Often, they don't take the district realities into consideration. Second, they also perceive how compassion plays out within the district health service itself. The District Health Manager and the team—how do they relate? You need to look into the welfare of your staff, including issues such as burnout, which are very prominent, especially during COVID.

When I became a District Health Manager, I visited all the health facilities in my district. When I went to some of the most remote places and encountered the challenges to simply access some of the health centers, I became very understanding about the difficulties that the health facility managers face. But if I did not take the time to visit these places, I would have continued haranguing health facility managers because they submitted their monthly reports late.

So at the district level, how can we make compassion a reality? First, by the district/county management demonstrating compassion. For example, in the way the manager relates to the team beyond the work that they do. In my experience in Bangem, we had social meetings on a monthly basis where we asked about each other's welfare, consoled those who had sad moments, and rejoiced with colleagues who had happy events. This actually impacted the work that we did.

Second, the district level can demonstrate compassion by judiciously managing the resources (human, financial, material) at their disposal. In Dr. Trzeciak's book, he talked about how compassion can reduce health care costs. A lot of waste happens at the sub-national level. If district level health staff feel abandoned by the national level, they develop a negative attitude towards using and managing the limited resources they receive.

Third, as Dr. Likaka mentioned, how can we integrate indicators to measure compassion? District health supervisors go out for routine supportive supervision. Within the supportive supervision checklists, are there indicators to measure compassion at the health facility level? In Cameroon, we have performance-based financing where facilities are assessed and financial incentives are provided based on their performance against a set of indicators. We should integrate indicators for compassion into these performance-based financing schemes and supervision checklists that exist in many countries in Africa.

Fourth, the district can develop strategies in collaboration with local NGOs to promote compassion at the community and health facility level.

Through these various experiences, it has dawned on me that **we need a health system with a conscience**. Everyone needs a health system that thinks about them and treats them beyond the technical work that they do.



A Human Perspective: Compassion & Equity

Samia Abdulle, Community Engagement Consultant, Clarkston, Georgia, USA

I want to reflect on the word "compassion". What Dr. Trzeciak said brought up a lot of things for me. One of them is the "other", and seeing every person as a divine human being. It's amazing when you look at a human being as someone with gifts, talents, and life experiences in a vulnerable space. And that vulnerability is there to bring you closer and also to give you something as a provider.

From a community space, I'd like to bring in this South African disabilities chant: "Nothing about us without us is for us." Being in a community clinic in the most diverse square mile of the United States, the challenge is how you see the whole human and not make assumptions about them. Clarkston, Georgia is known for diversity and refugee resettlement. But the people coming to the Clarkston Clinic are not refugees—they are people who have hearts and homes. The minute they came to the United States they were residents, and now they're walking into citizenship.

Language matters in health care. What we call people and the assumptions it brings matters. These assumptions can make a person feel like the "other". Like the question, "Where are you really from?" A small clinic in the most diverse square mile requires collaboration and really seeing this person as a whole—not a person that came from a low-income country or whose zip code defines their reality.

I want to share an experience of mine. I was coming to a meeting at Clarkston Clinic. I had a flat tire right outside the clinic, and it was a very important meeting I was running to. A gentleman from the Caribbean was outside, and he asked me, "What happened?" After I explained to him, he said, "I'll fix your tire while you're inside." When he finally entered the clinic to see the doctor, he said, "I'm sorry, I was fixing the car tire of a woman who said she's on your board. I'm relieved that I'm not just receiving free health care—I actually gave something back. I feel like I made a form of payment to you all." So there's a sense of pride among our patients in contributing to the space and to the people.

For low-income, marginalized minorities that we see at our clinic, there is something about equity and inclusion. When you see faces that look like you, speak your languages, and understand your experiences... I am from Somalia; imagine having a Somali medical student who is speaking that language to me. There is a sense of pride in knowing that my provider understands me, feels what I'm feeling, and that I don't have to explain the things I may have shame and guilt about. This is important to understanding this idea of how we cater to communities of color or disadvantaged populations.

I also wanted to mention that in this time of COVID, there are other issues people may be struggling with when come in. In another example, there was a woman that came into the clinic complaining about her feet. When she walked out of the exam room she had new shoes. We asked the nurse, "What happened inside?" The nurse replied, "She was complaining about her feet. We realized her shoe size was wrong and her feet were swelling, so we gave her a new pair of shoes."

This example illustrates that sometimes there are things a whole person may need. This is especially true during COVID. People may not have rent or know where the next meal is coming from. There is a level of stress, trauma, and uncertainty affecting these communities. So when somebody walks into our clinic, it is important to have wraparound services and to collaborate with entities that are able to extend the services that the clinic offers—food assistance, rent assistance, helping them fill out a form. When the clinic isn't working in isolation, but rather as a small entity in a community, you are able to address the needs of a whole person.

I like to say that Clarkston is inclusive—not diverse. Diversity is just counting people—we speak 120 languages, we are from 60 countries. Inclusion is about how many of the providers are from those places, how many languages are spoken, whether people feel culturally included, and whether providers culturally competent.

To me, that is seeing the divine.

DISCUSSION

Moderated by Shams Syed, WHO

Shams Syed: Andrew very nicely described the linkages at the national level. I'd like to pick up on two particular points he mentioned. One was about the guidelines developed at the national level; the other is training. The question to Dr. Trzeciak is: what are the key nuggets Andrew can take away about the development of guidelines that address excellence while bringing in the compassion lens? And secondly, what might you offer about how training institutions might bring in compassion?

Louis talked about compassionate leadership at the district level, from your examination of health care organizations, is there anything you would like to highlight as useful? Secondly, how might the use of indicators help their efforts at the district or county level?

Finally, Samia raised a very important point about equity. Looking at the different domains or elements of quality, how might equity be placed when looking at quality of services? Secondly, what are your reflections on the wider determinants of health that Samia raised, like food insecurity?

Stephen Trzeciak: The panelists raised such important questions as it relates to today's topic. First to Andrew's point as it relates to training guidelines, really what we're talking about is change. How does change happen? After studying this for the past couple years, I come back to three key constructs which are important to exacting change: 1) the evidence base; 2) time; 3) change is possible—compassionate behaviors can be learned.

The Evidence Base

First, with regard to the evidence base, I already spoke to some of the available data. More compassionate health care results in better health outcomes for patients across physiological, psychological, self-care, and quality of care domains. So once you see the evidence base, it's hard to just consider compassion a "nice to have". Rather, I think you begin to think that it is a cornerstone of quality care.



After looking at the evidence base, compassion is part of high quality health care. If you don't have compassion, you don't have high quality health care. You might have proficient technical care, but you don't have the totality of care. And patients will actually tell you that. There are a number of studies from the patient perspective that show quite clearly that when they are treated with more compassion, they believe they are being treated with high quality health

If we just believe that compassion is the dessert to an entree, that really isn't going to change people's behavior. There is an evidence base for quality.

Time

care.

Secondly, how much time does it take to treat patients with compassion? This is important because clinicians often believe that they don't have time to treat people with compassion. In fact, there was a study from Harvard Medical School that surveyed resident physicians, and 56% said they don't have time to treat patients with compassion. That is a staggering number, in my opinion.

This begs the question: How much time does it actually take? In going through all the data, we found 6 studies that actually timed it. What they found is that it was always less than a minute, and usually it was about 40 seconds for a meaningful compassion connection. So it really doesn't take time—people just think it takes time. A psychology study from the Wharton School at the University of Pennsylvania found that the only way we feel time affluency (meaning we have enough time and we're not in a rush) is when we treat other people with compassion.

Change is Possible

Third, we need to realize that change is possible. I used to believe that people are either hardwired for compassion or they're not. When you go to the data, that's not actually true. Specifically for physicians, there have been 75 studies that have tried to teach compassion. In three-quarters of those, it actually improved measurable compassion, often from the patient perspective.

However, here's the key: You have to want to. You have to have the mindset that you actually can get better. Compassion is a skill, not a trait. But if you believe it's a trait, you won't put in the time to get better.

Indicators

To Louis' comment about indicators, my colleagues and I published a <u>5-item compassion measure</u> in JAMA Network Open last year. This is measured from the patient's perspective. I personally don't put a lot of value on what a physician thinks about their own behavior. There is a plethora of data to show that physicians often believe they are very compassionate, but the patient isn't experiencing that. So I'm interested in the patient perspective, and that 's why our measure reflects this.

Compassionate Leadership

To Louis' comments about leadership, there are a number of studies that show when there are compassion practices in a health care environment—such as recognizing people when they are going through difficult times, recognizing people for their compassion, and celebrating people who have exceptional compassion—the patients' experience gets better. So having compassion in leadership to treat front line health care workers is vitally important.

I was really touched by Samia's comments regarding equity and inclusion, but really about humanity. That was something I didn't say but should have. All over the world, but especially in the U.S., we are currently in a brutal confluence of injustices. We are in the midst of a coronavirus pandemic, which is afflicting and killing people of color disproportionately to what white people are experiencing. We are also in the midst of witnessing the killing of George Floyd, which has set off much discussion and unrest, as it should have for how appalling it was.

This brutal confluence of injustices makes me recognize that **empathy is really a precursor for compassion** because you have to sense and detect and feel someone's suffering if you're going to respond to it with action, there's also a precursor to empathy. **The precursor to empathy is fully seeing another person's humanity.**

As a white person, I don't know what it feels like to have my humanity go unseen. I can only imagine what it feels like to experience indifference to your humanity through the disparities and structural racism we have. You could say all health care disparities are somehow rooted in a lack of empathy for populations experiencing health disparities. So I think what Samia said about seeing people's full humanity is necessary before we get into everything else about compassion.

Thank you again to Andrew, Louis, and Samia for these wonderful insights.

Shams Syed: Stephen, thank you very much. Now I'd like to turn to Andrew, Louis, and Samia. If you could each share one key lesson that you are going to take home with you in your work.

Andrew Likaka: Quality is meaningless without compassionate care. That's the key.

Louis Ako-Egbe: For the caregiver, compassion benefits you more, and this can address burnout. As a district health or facility manager in these difficult, very hard-to-reach places, when you show your colleagues and patients compassion, you redevelop it. Particularly at this time of COVID-19 when all of us are stretched thin, relating compassionately with your collaborators is what we need to do.

Samia Abdulle: My reflection is to continue to advocate against all the systematic injustice that is built into health care access for minorities and people of color. I experienced this myself coming from Somalia, East Africa—that I have to justify that I am Black. Continuous advocacy for access to health care and wraparound services, particularly during COVID for minorities and communities of color, because COVID is Black and is hitting on minority communities harder than any other communities.

QUESTIONS & ANSWERS

Moderated by David Addiss, FACE

David Addiss: Thank you to the participants who have sent in such fascinating and profound questions. They range across the board from issues about the relationship between compassion and trust, to the relationship between compassion and justice, to how we influence donors and decision-makers about the necessity of compassion, to a more in-depth discussion around indicators, particularly at the systems-level.

Because we are almost out of time, rather than dig in to each one of these questions, I'd like to ask each of the presenters: What sustains you in your effort to be a compassionate person and health care provider?

Andrew Likaka: Since the time I went to medical school, the passion to save lives is my motivator.

Louis Ako-Egbe: For me, it's the fact that I've been a victim of a system which is not as compassionate as it should be, so there I have a burning desire to change that.

Samia Abdulle: What sustains me is a personal space. My mother is Sufi. I remember when I was young, maybe 13 years old, we went to Egypt for holiday. We were visiting a mosque. My father had sent money for our monthly expenses. When we came out of the mosque, we saw my mother and her body was full of jasmine necklaces. And we asked my mummy, "Where did you get all these jasmine necklaces?"

We saw the street children who were beggars jumping on street signs. And our mother said, "I gave all your money to them, and I bought all their necklaces. So now you step into their shoe—sell these to get a ride home."

So I've learned how to be in the "other" space.

Stephen Trzeciak: What sustains me are relationships. What we found in going through the data, if burnout and resilience are a continuum, one of the biggest contributors to resilience under pressure and stress is relationships. Sometimes it's relationships with patients, sometimes its relationships with colleagues. During COVID, my relationships with my nurses in the ICU have been very important to me. Relationships with my loved ones matter deeply. I believe that in general, not just in health care, the foundation for resilience is relationships.

David Addiss: I thank all of you for being willing to answer such a personal question. I didn't give you any warning of this, so I appreciate you sharing that with us. I think all of what you've said is critically important. We do need to be sustained in this work. The quality of our relationships is so essential to that. For many of us, religious faith is also very important is important in sustaining the compassionate work that we want to do.

I apologize we don't have time to go into some of the really key questions that have come in. Once again, we've underestimated the time it would take to completely unpack some of these questions. We really thank everyone for their participation. Take care and be well.

