Laura Roberts, MD. Professor and chair, Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, *"On Becoming A Physician: Stresses and Strengths of Physicians-in-Training"*

Thank you. Thank you for being here late in the day. And who are you? Do I have medical students? Thank you for entering the profession, working so hard, taking on debt, doing all that you're doing. Who are my residents? I have some residents? Thank you for coming. And who are my faculty? Thank you for dedicating your life to academic medicine because you had other choices and yet here we are. And thank you to all of the rest of you who are friends of this institution, of Dr. Waggoner and all that we will talk about today.

So the first thing I'd like to ask is for people to remember. For medical students it just means remembering like yesterday, maybe earlier today but physicians who have been in practice for awhile and faculty, please think back to what it was like when you were a resident and when you were a medical student. And I'll just give you an illustration. I sat down last night and I thought about what it was like for me. By age 24 when I was a second year medical student, third year medical student I had watched one of my classmates sneak alcohol in the anatomy lab. I had taken care of about a dozen patients who were on clinical trials, many of whom did beautifully

and went home and had extended life and an extended quality of life. But a couple of whom died, one of whom died on a Texas trial, an African American patient with cell carcinoma. Terrible prognosis who was in a trial who believed that he was in a study to extend his life but actually it was just to determine how big of a toxic burden his body could carry.

I held the hand of one of my patients who was 15 years old in a life threatening asthma attack all through the night, completely exhausted because I hadn't slept the night before. I went up scouring the wards for patients so I could interview them. It was part of what we had to do when I was in medical school. Got up very early in the morning, went up to the coronary care unit and encountered one of my classmates who had taken a tricyclic overdose the night before. I quickly went off hoping that he didn't see me.

I saw a classmate who kept on going to the student health center because he had terrible, terrible GI symptoms before exams and the attending physician there said, "You know, I had that too. Isn't it terrible? It's really awful." Well when he had ravaging Crohn's Disease that had gone without being diagnosed that led to him nearly bleeding out he then dropped out of medical school. I occasionally see him modeling in catalogs from time to time which is like, I think it was a good ending.

I had my first child. I had my first child in medical school. I gave birth in front of the resident who later graded me on my OB/GYN rotation, oh my God. My classmates read my chart and I was mortified because they knew my weight but they also learned kind of my family history, all kinds of stuff because that was back in the day. I put patients on involuntary holds. I took care of two patients who were concentration camp survivors. I performed urologic procedures with my, you know, obviously attending physicians on children and elders who then had devastating cancer. We snuck homeless patients in and had them stay overnight in the hospital and give them a little bit of medicine just to kind of keep them in from the cold Chicago cold in the middle of the winter.

So this is all by the time I'm 24 and this is after just sitting down for just a couple of minutes last night and thinking about these incredibly powerful interactions. But you saw in the midst of those were the issues that my classmates had, not just my patients, really significant health issues. And that inspired a whole line of work which I'm going to share with you today.

So first let's think about medical students. There are many thousands and I think I will use this pointer. Right here, about--more than 40,000 students who apply to enter medical school. If you look at the pattern over time it's growing to be more equal proportions of men and women but not everybody gets in. Those are the applicants. There are roughly 16,000 or greater applicants or graduates every year and again, a little bit greater proportion of

men but really a closer disparity now. And if you then look at the total number of applicants in the match, in the overall pattern, you see that there are many, many applicants but really the number of positions is only growing just a little bit. And part of the big reason for this as you'll see and I think is evident is that these are all of the applications in the residency match, right? So you've got seniors of U.S. medical schools as the majority. U.S. citizens who went to international medical schools is another large group and then that second is non-U.S. citizen student graduates of international medical schools. So you see over time there's a much greater proportion of internationally trained or international origin individuals. And you can see there are many different areas and our interests and the different areas of medicine are populated by people with different strengths and performance records.

So this past year there were 23,000 PGY1 positions offered and 15--more than 15,000 were filled with U.S. seniors. The 96 percent fill rate was one of the most successful on record and of the U.S. seniors who matched 81 percent went to one of their top three choices. So right now our medical students are really driving the decisions. And there were more overall residency slots. Internal medicine had more than 100 new positions. Family medicine had 100 more positions, pediatrics, a handful and emergency medicine. So you can see that there is an increment in these primary interfaced areas.

So I don't know if you really remember but this is a really great summary of what it's like to be in medical school. You've got to start sometime. Why don't you operate on this one? I know, I'm going to let that one sink in a little bit. It's hard. It's like way hard. It's unbelievably anxiety producing. I'll never forget the first day I went on my third year rotation and my resident said, "Pick up a patient." And I was like, "Pick up a patient?" "Pick up a patient. Pick up a patient. What does pick up a patient mean?" I was terrified. So this idea of really starting and assuming the identity as a physician, you are the one. You are the one who becomes so profoundly responsible for the well being of another person is a very intense, very, very challenging thing. And what we've learned over the last few years is that there is a cost. There's a cost in the psychological well being of our trainees.

We know from studies that have been done over a number of years that psychiatric symptoms are emerging in both medical students and residents, that they're linked with particular training stresses and milestones and they're much higher at certain periods of training. But the proportions are very great. About a quarter of medical students have anxiety symptoms and about 40 percent, nearly half will have significant depressive symptoms. So the point is these are measurable, clinically meaningful findings. And we know that there's suicidal ideation that is being experienced by our medical students. I mean it's unbelievable. The most unbelievably talented, important individuals and as a resource in our country and the world really

and to have our young people be so distressed that contemplating suicide is something that is becoming almost ordinary. And it is greater than in the general population and it is greater than age matched, gender matched comparison professional students. And it's greater among under represented minority physicians in training.

It appears to heighten, the suicidal ideation in particular, this pattern appears to be greater during high stakes kind of transitions and high stakes evaluations. And it's greater among students with preexisting illness and it's very prominent, in fact your own senior associate dean has done some of this very beautiful work looking at how dropping--students who are contemplating dropping out or do leave medical school are a particularly important at risk population.

So let me walk you through a few of these studies. This was a six school study of depression and suicidal ideation, large number 2,193 physicians in training. By that I mean both medical students and residents just for simplicity of presentation. Twelve percent overall met criteria for probably major depression, nine percent overall met criteria for probable minor or moderate depression at that time. So it's a cross section. Greater among medical students than residents which is interesting. Greater among medical students than residents, I have a hypothesis about that, and greater among women than among men. In this study six percent overall have reported recent suicidal ideation and suicidal ideation as I mentioned in this particular

study was greater among underrepresented minority students than majority of physicians in training. So Alaska native, Native American, Pacific Islander, and African American physicians in training, this is a very huge burden of suicidal ideation that people are living out. And Hispanic and Asian physicians in training, these percentages are not as overwhelming, given other demographic and other comparisons, these are very high numbers.

There was a study in the United Kingdom of more than 2,000 medical students and a vast majority of the doctors, meaning the residents and 54 percent, a little bit over than half of the medical students reported their own personal illness experiences. They felt less prepared for their work. They felt more anxious and performed less well on examinations.

There's also been this talk about burnout and I have to say this was not a concept that I embraced readily. It seemed a bit vague but what they--the model is a combination of what's referred to as emotional exhaustion I think has intuitive meaning, depersonalization which has in this context the meaning of distancing, kind of objectifying and distancing. And then a low sense of personal accomplishment, so how effective we feel. And it was not meant to be just a simple marker of depression. And of these more than 2,000 students 50 percent met criteria for burnout, 46 percent for depression, and 11 percent astonishingly had contemplated suicide in the prior year.

And when you looked at quality of life scores they were lower than comparison populations.

So I like this slide too. This is Calvin and Hobbs and he says, "Want to see something weird? Watch. You put bread in this slot, push down the lever and in a few minutes toast pops up. Wow. Where does the bread go? Beats me. Isn't that weird?" So I like to do this as the sense of wonder bread and at the end we become toast, okay? It's really--it's been--it can be hard. And when I think as a psychiatrist though if we are defended, we are exhausted, we are shut down, we are toast, it's hard to be flexible and responsive and resilient and problem solving and to meet the next person with a sense of joy and kind of the sense of the privilege we should feel when we take care of patients.

So this study was very interesting and it kind of looked at this issue. If you had a great deal of burnout, emotional exhaustion, depersonalization, and low sense of self efficacy and then you look at what are referred to as unprofessional clinical behaviors and I'm going to go through them in just a minute, is there a connection? And these are the examples of "unprofessional" clinical behaviors: signing an attendance sheet for a student who wasn't present say at a lecture like this, copied from a crib sheet of another student during an exam, permitted another student to copy from you during an exam, taking credit for another person's work, reporting a laboratory test or x-ray is pending when you really weren't sure if it was

ordered if you knew it hadn't been, ever reporting a result as normal when you knew that really it had been omitted from an exam, ever saying you ordered a test when you actually have not, and endorsing one or more of these--more than one of these.

So the idea is these are kind of softer signs of unprofessional behavior and is there a connection? And those researchers, one of whom is in this room, did find a connection. There was an association between a number of cheating or dishonest clinical behaviors and the scores on these measures related to depersonalization and emotional exhaustion. So the idea here is that when we become kind of defended, distanced, we're interacting with patients as if they're objects, we're kind of detached from the humanity, the humanness of the experience, it's a little easier to take shortcuts. It's just a little bit easier.

This study though had some good news which is that there were higher physical quality of life scores in similar aged individuals in the general population and actually with time burnout seems to ease up. So there's something about the entry, the entry into certain kinds of duties that really creates a vulnerability. It's a vulnerability developmentally in the training process. So situational stressors rather than fundamental attributes of the individual may be at play and there may be really ripe intervention points that we can work with. And I'm going to tell you about my work which was really inspired by my early experiences. And I also want to use it as an illustration of how you can do shoestring research. We did this study,

literally I told earlier of the story about how we gave M&M's as reimbursement to people who took the survey. I went to a bunch of my buddies and said, "I'm really concerned about this. There's almost nothing in the literature. Let's do a study together." So I got colleagues at multiple places to do this totally cheap. We literally had 1500 dollars to pay a statistician to help us with this. So you really can do these important labors of love and pursue ideas, even if it isn't on somebody else's funding agenda if you see the importance of it.

Anyway in this study we had over 1,000 medical students who participated from nine different schools. Ninety percent expressed need for healthcare. Fifty-four percent identified a need for physical healthcare and 46 identified a need for mental healthcare. However the majority of students didn't seek necessary care. They encountered difficulties in obtaining care about half of the time. They felt that it was too difficult to take time off and they were very worried about the cost of care. And a majority of the students in this study kind of crab walked up to a resident they knew and asked them for a prescription or crab walked up to an attending who they knew was a softie and asked for some medical help rather than going and seeking care from a doctor, having a traditional doctor/patient relationship and all that that involved. It was convenience and cost.

The other thing that we looked at is what kinds of concerns do people have that stop them from seeking care that aren't related to convenience and cost?

And really academic jeopardy emerges a huge issue. There was significant concern expressed by the students in our study that academic status might be jeopardized if the dean of students learned that they had different health issues. They also thought that on individual rotations if their supervisors learned that they had health issues they would get worse grades, even if their performance was the same, that they wouldn't be seen as the tough, fierce physicians that they needed to be. There was obviously greatest concern expressed for stigmatizing health issues, drug and alcohol issues, HIV, serious infection, the mental health issues, and also interestingly cancer, relationship issues. And there was a very strong preference for off site care, so care not received at your training institution for a stigmatizing health issue. And 90 percent of respondents wanted insurance permitting off site care which I don't know what the standard is but I don't think that that is typical across the United States.

We asked a subset to almost 1,000 to respond to a series of vignettes depicting severely ill student peers. So in the context of a suicidal classmate and I've got to tell you, these vignettes were really vivid. I mean, these were bold probes. It wasn't an ambiguous suicidal classmate. In this, 45 percent said that they would tell no one or take no action. And the range across schools was 19 percent to 70 percent. What I would say is at the school where it was 19 percent they were doing some things right. And the school where it was 70 percent, boy, there must have been some harsh issues in that

culture. Thirty-seven percent, about a third would seek advice and really a small proportion would tell the dean's office or intervene actively. With a student with known alcohol, amphetamine use, and erratic behavior endangering patient care on a clinical rotation 53 percent would tell no one. Thirty five percent would seek advice and only 12 percent would tell the dean's office. So very significant issues and wait, let me just finish up. I mean remember that the essence of professionalism is that we belong to a profession that have two components to it. We have the privilege of serving this role, acquiring expertise, serving patients and serving society but there are obligations to it which is like we've got to be really good at what we do and we've got to assure that our profession, our colleagues within the profession fulfill these responsibilities well too. And if we have potential for impairment or compromise in our colleagues that is as much of an ethical obligation that we have in the profession as making sure that we take very good care of patients. So it's two pieces to it. So this, I thought, was very concerning data.

We then did a smaller study. It was funded by the Arnold Gold Foundation, again, shoestring research but we wanted to look at these same questions in residents. And we found a smaller percent reported frequent health problems but it was definitely worse among the women. Sixty-five percent of residents in this particular study reported a health decline over the course of residency and again, worse among women. Residents identified

healthcare needs but again, avoided or delayed care. Time constraints, privacy concerns, expense, discomfort with the dual role interestingly were offered as reasons. And there was also concern about quality of care and how to access care. Our trainees who are in our midst have difficulty accessing care sometimes. Resident also endorsed informal consultation or curb siding is a common practice due to schedule, cost, and confidentiality.

We then talked--asked people how much--basically how much trash talking is going on in your culture? How much of a problem is it if a person is sick? And we asked about private health issues of residents and were they perceived as being discussed a lot? Kind of is there a lot of gossip or isn't there not? And really the residents responded by saying it was only sometimes brought up. But interestingly after being absent from work residents were perceived as being treated a little bit more negatively and some empathy among--from some colleagues and some ostracism from some colleagues after they've had to miss work. The residents felt that their fellow residents fell into two categories, either more empathetic or more inclined to ostracize than attendings. There was kind of a bi-modal response. And it was a more pronounced pattern among women respondents and among women--or residents in specialty training really conveying a greater sense of stigma and negative impact and the importance of special care pathways for these areas.

And I'm sorry, I was noticing it didn't come across quite as well but on the top what this graph shows is whether people would have concern if anybody learned about them having different illnesses. And what you see is basically a perfect stacking of more stigmatizing illnesses to less stigmatizing illnesses. Again, would you like to have your care inside or outside of the institution? Again, it isn't as easy to see but again we have kind of a perfect stacking that people would prefer to have outside care for stigmatizing illnesses and they're comfortable receiving care inside for things like pain or allergies.

And cost, time, and quality are the kinds of things that lead people to want to stay at their training institution but embarrassment and confidentiality drives people out. This was what we found with both residents and medical students.

So these are some of the major issues that we're facing right now. What are some of the causes? Well there was an important study about medical student abuse done and I would say that this is good news and bad news. This landmark study that was published in 1990 was at University of Colorado and there was an 83 percent response rate for this large study of 400 students. And the medical students there reported abuse as nearly universal. Seventeen percent of students had been abused by supervisors and residents, most commonly by residents interestingly by the end of first year, 33 percent by the end of second year, 68 percent by the end of the third

year and 81 percent by the end of fourth year. The highest incidence was in third year with 20 percent of the students experiencing at least five episodes of abusive treatment that was of major importance and very upsetting. And these were not soft, pastel descriptions of abuse.

In more recent times the AMC graduate questionnaire has really been asking very deeply about mistreatment and abuse. And I'm sure that we've made a great deal of progress. And yet 12 to 17 percent of graduating students reported mistreatment in the context of medical school and 18 percent of graduating students had witnessed mistreatment of a peer from the most recent data. And as I say the things that we're talking about are being publicly belittled or humiliated, being required to perform personal services. I don't know about you but I was asked to babysit and do--pick up dry cleaning. Receiving unwanted sexual advances, not as common but it should be zero, being subjected to personally offensive remarks, should be zero, being denied opportunities for training due to gender, should be zero, receiving lower grades due to gender, still unbelievable. So what you see is this kind of dynamic tension of the pre-existing strengths, incredible resilience, incredibly positive motivation, the intelligence and tenacity of a remarkable group of people who have joined us in our profession, positive experiences of being inspired by role models, feelings of being effective and doing something of importance, trying to adapt in the context of the stresses of medical school and really the potential positive environment. These are

all things that could really strengthen and enrich the experience of medical students. But we also know that students come with some preexisting vulnerabilities. There's a reason why we're here, many of us. They may have negative experiences and stressful experiences in the course of their training. There may be the emergence of more maladaptive behaviors than we would like to see as a profession. Really disproportionate and inappropriate stresses and can be kind of a negative professional environment that can hold people down.

So we've come to kind of a crisis. It says either cheer up or take off the hat. I didn't mean that about you guys. Cheer up, we're getting there. It's okay. But it is--I think either cheer up or take off the hat was kind of the mindset when I was in medical school. I think it's a little bit more sophisticated, a little bit more nuanced thankfully in this time. And I guess I want to say that we cannot make the experience of human suffering easier. We can't make holding a child's hand as they try to struggle through the night and not die from their life threatening asthma any easier. This is the reality of life and death and illness and disease and unfairness that we work with and work with every day. That's why we joined our profession was to try and do good for these very, very people. And I love this poem. It's by Emily Dickinson. It says, "On the bleakness of my lot, bloom I strove to raise. Late my acre of rock has yielded grapes and maize." So in other words some of our patients are going to have a very hard path and that's the nature of it and there's

nothing I can do to make medical school make that go away. I don't want it to. That is the nature of the profession. However what we can do is we can recognize the issues for their reality, what the stresses and the impact on our young colleagues and we can support them. We can help them through this. There are ways that we can take this very difficult set of issues and transform them, I think, into a source of compassion and a sense of motivation and a reason for being in our profession.

So let me tell you about what I think are the really positives in all of this. If--I'm going to have you look at me. If any of you have ever been ill and have also been a caregiver you know that you can never treat a patient like an object. If you yourself have ever lived through an illness or someone you deeply love has lived through an illness you know what it means to suffer, to feel kind of scared and helpless. And so the power of that as a compassion inspiring experience is one that I think that we need to recognize. And actually in our study residents do recognize this. Personal illness experiences have been seen overall as giving rise to greater feelings of empathy and more compassionate clinical practices, enjoying talking with patients, feeling compassion for patients, valuing a thorough understanding of your patients, sitting with them, helping them bear what they're going through, providing more effective pain management. And this was seen as more relevant, more critical for people with personal illness experience. Women and men saw this a little bit differently. It was a very strong result

for women who have had personal illness experiences as seeing the power of the compassionate lesson in that.

And that isn't just our work. This study that was done in the United Kingdom where they found that people who were physicians in training who were stressed and felt ill and felt like they weren't performing as well still felt that they were better prepared overall for their medical training. They understood the realities of illness. They conveyed more empathic attitudes, deeper sense of motivation, patient centeredness, and attentiveness to the personal implications of clinical practice for their patients. And in our study I had these beautiful, beautiful gifts of stories that I'm going to read a few of them to you. These were the comments of medical students to open into questions about family experiences with illness and empathy and their intentions about being physicians.

So one student wrote, "I would hope to be like the physician who cared for my father when he was passing away." Another student wrote, "My mother had stage four ovarian cancer. I had many opportunities to interact with her oncologist, respect them for their knowledge but determined that my own bedside manner would be markedly warmer than the vast majority of house staff and attendings." Another student said, "My brother underwent ten neurosurgeries. Mistakes made by physicians and the lack of technology convinced me to enter and advance the field." Another student wrote, "Seeing many family members die from cancer has had a profound effect on

my becoming a physician. I would not allow anyone to die in a hospital surrounded by overworked, impersonal staff."

I think every patient who dies in a hospital is surrounded by overworked, I hope not impersonal but I think overworked staff. This is another student. He wrote, "I had a skin graft for a lesion on my head and the day of the surgery at 6:30 am I was consented for a possible skin graft. I was alone and nervous so I signed this consent. Now I have a five centimeter by six centimeter bald spot on my head. I didn't think clearly. I was without support. It was not an appropriate time to obtain consent. The experience made me very cynical and skeptical towards physicians. I think that very often doctors do what's easiest and efficient with little concern for their patients' well being." Another student wrote, "I have osteoarthritis in my right hip which was removed from me many joys and stress relief activities in the past year. I am learning how far reaching a disease can be into someone's life and the need for good communication from healthcare workers to alleviate fear and anxiety."

I think these are going to be amazing doctors. I think these individuals who have lived through this who understand. I had another example where a wonderful medical student wrote, "I had to take antibiotics four times a day. Do you know how hard that is!!" I just thought it was a wonderful insight. So I think there's power and something very positive that we can capture with some of these concerns but we have to be smart enough to see it. And

we have to be prepared and we have to help our early career professionals be prepared to see this.

So let me just offer some solutions and a few other comments. I think we do really need to express our concern palpably. We need to elevate the topics of self care and wellness within our curriculum and within our culture. We have to recognize the stresses, the predictable stresses that occur that are completely kind of embedded in the architecture of our individual curricula at different medical schools. We have to recognize illness, educate people about symptoms, not normalize some of these things when they actually have reached a clinically concerning level. We also have to think about life cycle and stress issues, role and significant issues that our medical students are experiencing in residents. We have to have really realistic policies and routines, procedures. It shouldn't be invented every time a student or a resident has a concern. And we have to make consistent efforts in support of a positive training environment that affirms people's overall well being. In our curricula we need to develop opportunities for self reflection, motivation, the importance of self care, kind of deconstruct the hidden curriculum of the superhuman, super macho physician to one where it's okay to be human and here we are together. But it's very important that you take care of yourself so that you can be here in our profession to help serve our patients.

There appear to be setting specific and specialty specific--I hesitate to say gender specific but perhaps some very particular targets that we might want to think about with our teaching. I think small group, case based discussions so that it becomes very real for people will be valuable. Targeted content related to recognition of symptoms of illness. Addiction appears to be a significant concern, different treatment modalities and the optimism that we have when we give people accurate information about mental health and physical health treatments, self care skills training and coaching and mentoring initiatives for the faculty because they're the ones who are going to need to implement this. We also need safeguard pathways to care, policies and procedures to protect confidentiality, accurate information to students and residents about what happens when they seek care. Who is going to see the record? Who is going to know? They're terrified that it's going to damage their ability to get into a residency or to get a good job. They're afraid that it's going to influence the grades that they receive. Protected access points and role separations, you don't have the wrong pairing of clinicians who provide care for medical students and the people who actually grade them. Values informed approaches to insurance and services, not just cost driven. This is a battle I've had at every institution I've been at. We have to be smart enough to offer insurance options to students and to residents so that they are able to seek the care that they need. And it shouldn't just be driven by cost. We may need resources to help

subsidize care and non-punitive approaches to early recognition and self referral.

Now I'll tell you a story. These are Roma, Roma people in Europe, perhaps the most marginalized community in all of Europe. And there was a beautiful study done by some of my colleagues at Medical College of Wisconsin who recognized the huge issue of sexually transmitted diseases in the Roma population. So what they did was they went and instead of scolding people to engage in different sexual behaviors or to behave badly--not so badly, instead they went and gently talked with people and tried to find out who were the opinion leaders? Who were the people who set the social norms? Who were the people who were like the emotional metronome, the drivers of the culture within the Roma population? And they identified, say, a dozen people and they went and sat with this dozen people. And they talked with these natural leaders in the community about the importance of HIV recognition, sexually transmitted disease recognition, working with these opinion leaders on safe sex practices, all of the things that would decrease transmission of disease. And then they turned them loose. They let them go and do the heavy lifting in the community. They just inspired them and informed them and they had these opinion leaders go and deal with what was probably the most radical and serious public health issue that this community was living with. Okay? And then they looked at zero prevalence of HIV, incident of new infectious diseases and not only did

the problem go down with these diseases, over time the protective effect of these conversations improved the community's health with the longer--the longer you looked at it the more the improvement occurred. Okay? So I'm trying to explain to you the importance of us. If we are the ones who influence our community whether we have the proper title for it or we're just the go to people, the people who live out and are role models and are important in influencing the social norms and behaviors within the culture here at the University of Michigan and my places that I've worked at, we can transform this problem, serious problem that it is now and have it improve not with like a lot of interventions. You do something today and it decays over the next several months. Instead, if we can put this in the hands of the opinion leaders in our culture then we can inspire and really bring about significant culture change that will grow and the social norms themselves will change. And I'm telling you, if you can do it with the most impoverished, marginalized, and severely ill subpopulation, vulnerable subpopulation in Europe I'm pretty sure we could do it here. I'm pretty sure that we could accomplish the kind of cultural change that is absolutely necessary.

But I will tell you that it's going to be serious and hard. This was a study that was just published in the archives of *Surgery* and it had to do with suicidal ideation among surgeons, American surgeons. And what they found in this study of more than almost 8,000 surgeons is that 15 percent had had

thoughts about taking their own life. Seven percent had had thoughts about taking their own life in the prior year and 39 percent were reluctant to get help because they were afraid they were going to lose their license.

So I tell you about--I tell you about the Roma and I hope to inspire you that we can change things through this very on the ground, very deep opinion leader kind of approach where you, each and every one of you take responsibility to talk with others about the importance of these issues and the ways of seeking care, the importance of recognizing these problems in our culture. But I will tell you, we have to start with ourselves first. We will have to look at our own issues with great courage. So this is the kind of issue. We have to create a culture of courage, compassion, and belonging. It accepts the harder aspects of medical training while also creating a culture in which people are valued. They have a sense that they deeply belong and are engaged in meaningful work that will never be easy. Being a doctor will never be easy but it should be meaningful and you should have a sense of purpose and a sense that you belong. And these are very strong protective factors in people's lives. We have to get clarity about our professionalism responsibilities which is first around serving patients, building expertise, building new knowledge, assuring that the future is better for the people that we serve, but also, making sure that our colleagues are doing okay. We need to engage in professional development for faculty and staff, really do honest inquiry scholarship and the sharing of best practices across the country and

leadership and role modeling on every single level. And those of you who are students who feel very relatively disempowered, you're students, you are important influence leaders, those of you who are residents who are really critical to this and those of you who are faculty, we are in this together and need to help support all of our colleagues.

So with that, I'll say that professionalism is this social contract. And as Bob Dylan, the great moral philosopher said, "A hero is someone who understands the responsibility that comes with his freedom." We have the most immense privilege by serving our patients and working on science and engaging in education, working in communities, being leaders in this profession that serves others and helps others bear their suffering. Sometimes we get a cure or remission but mostly we should be here to help people bear their suffering. But it comes with a little bit of a price and I thank you for your listening tonight.