

## ***Supporting Resilient Older Adults: A Focus on Life's Purpose***

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Victor Strecher: Thank you so much. I really appreciate this, and I appreciate everyone getting on. And I know many of you are in the middle of your busy days or you're at home and trying to do a bunch of things. I'm going to see if you can take a break for this hour and take a nice breath and let it out nice and slowly. And think about giving yourself a gift for this hour. A gift of finding purpose, because we're going to talk about not only how you can help other people find purpose in their lives, and how you can help people make significant changes in their behaviors and their health over time. But also maybe how you can do that too because we're kind of all in a confined space right now physically, but also maybe we're in a confined space mentally. So what I'd love to do is help all of you see what we can do together to give ourselves this gift for the next hour.

So let's see what we can do, right? So I am going to be talking about older adults, but at the same time, purpose is really relevant to human beings, to anybody who is alive, really. So you might be thinking about purpose in your children, purpose at midlife, all sorts of time. So think about translating this to lots of different people in your life, including yourself. So what do we mean by a purpose in life? So I like this really simple definition. It's the degree to which people are directed, motivated by valued goals. There are two important pieces of this. One is value. What do we value? What's most important to us? What do we care about? And goals are basically saying, we should care about what we care about. And it may seem obvious that we should care what we care about, but imagine how many things we might say I care about this.

Do you really care about it? Have you set goals around caring for that? And also, do you care about a lot of things that you don't care about? Do you spend a lot of time thinking about, oh boy, what is Kim Kardashian wearing on social media right now? Do you really care about that? Or does that really matter so much in your life? So one thing purpose does is help you focus on the things that really matter most. So that's what I mean by purpose in life, it's around valued goals. We also know that setting goals around things does better than just saying I'm going to do my

best. So you might wake up and say, well, I'm going to be the best person I can be. That's great. But if you have specific goals, which we might call purpose around these things that you deeply value, you're much more likely to direct yourself toward those.

So that's what I mean by purpose in life. When we think about purpose, I'm not going to go through all the studies because they're over 1,000 studies now that have looked at purpose in life. But one of the things we find with many, many, many thousands of studies is that people with stronger purpose are more resilient. And by the way, that comes in handy in a pandemic, frankly and people with strong purpose have more type one interferon expressed by their genes. They have more antibodies produced by their genes and antivirals produced by their genes. Again comes in handy in a pandemic. People live longer. I'll get to that in a second. They sleep better. They have better diets. They even make more money, which is interesting. They also, and this is a study of middle-aged women. Middle-aged women who talk about having a stronger purpose, had better sex.

That's not bad. So imagine those are not bad side effects for having a strong purpose in your life. People with a strong purpose also have less cognitive conflict. We've done a study that showed that very clearly. People are just less conflicted if they have a purpose. And we did a study, a neuroscience study of this, they have a lower fear response. They have less inflammation. And while if we get a cut, we want inflammation to close that cut up, in general inflammatory cells and this pro-inflammatory response is really the - it's the fertilizer to chronic disease. It's not something we want too much of. And obviously it comes in handy in a pandemic if we can have lower inflammation, less depression. And interestingly enough, I'm going to focus on this, Alzheimer's issue and people don't know why this is the case, but there are three really good studies of this following people who are just recently retired and controlling for age, race, gender income, education, health status, health behaviors.

After seven years, people with a high purpose are 2.4 times less likely to develop Alzheimer's disease. That's incredible. So we don't know exactly why, but there may be some good explanations related to improved sleep and some other things. So very exciting. Also people

with stronger purpose are less likely to burn out. This is Aliyah. Aliyah is one of my doctoral students actually at the University of Michigan and she and a team of people got together and they started taking a look at purpose and mortality among people who are 50 years and older. And so if you can't read the survival curve, don't worry too much about it. But all it's saying is over time, meaning over 10, 20, 30, 40, 70 months, what you see is that people with a strong purpose are more likely to stay alive. They're more likely to be surviving. And that survival probability is almost 90%. It's around 88%.

Whereas, and those are people with strong purpose. Think about yourself on a scale of one to six, are you a one, are you a two or are you a five or are you a six? So you can take a look at this. So if you're a six, those chances of survival for people 50 and older are really, really high. The chances of survival among people with lower purpose is very low. It's around 75%, less than that actually, around 73%. And you may go, okay, well, the people with stronger purpose have more resources. They're more optimistic, are better educated. They make more money, blah, blah, blah. Well, guess what? This study and Aliyah statistically controlled for all of those things, age, sex, education, race, marital status, you name it. What we might call the kitchen sink. And after the kitchen sink was controlled for, still couldn't make this purpose effect go away. Pretty amazing.

So one of the things we as scientists like to ask then is how, what is going on? Why this ephemeral concept of having a purpose in life is so transcendently important in so many areas, what's going on? Well, let's go back to some of the basics. I'm going to show you a picture of two people, okay? Which person looks younger in your mind, the person on the right or the person on the left? If you guessed, well, it's probably the person on the left, isn't it? And by the way, this is a trick question, because this is actually a composite of 10 identical twins. So this composite of 10 identical twins, think about identical twins, they are born with the same DNA, right? So when they're older, they should be the same looking, right? They have the same DNA. Well wrong, right?

Take a look at this composite of 10 twins. They look very different from one another. And that's because stuff happens to each person that causes them to look older, right? So this group on the left that group of 10 identical twins, they were judged to be 64 years old. On average, they had a group of nurses actually judge this and that same group of nurses judged the composite twins on the right to be 74. Amazing that around that age of 70 that literally is on average, this difference in looks of 10 years, judged by nurses. And I love nurses, they're great judges. So what's the difference? What is going on? Why are they different? There's a fundamental difference between them right at the chromosomal level. And it relates to what we call telomeres, the green portion, the green glowing portion of this chromosome. Those are our telomeres.

Think about them almost as the aglets of our shoelaces, those plastic caps at the end of our shoelaces. And when those telomeres start getting shorter, think about aglets on shoelaces, we start needing new shoelaces, right? Well, when our telomeres get shorter, we need new lives because our telomeres protect our DNA essentially from fraying. And there's a fuel, an enzyme that fuels our telomeres called telomerase. This whole area, this whole role of telomeres and stress and aging process all was really discovered and developed by a woman named Elizabeth Blackburn, this wonderful Australian researcher now at University of California, San Francisco. And she, along with her colleague, a psychologist who studied stress and resilience, Elissa Epel wrote a book called *The Telomere Effect*. And they've been on all sorts of national TV shows. This has obviously hit the media. On the left is Elizabeth Blackburn, on the right is Elissa Epel.

And they wanted to study this. Elizabeth went to Elissa and said, you're this world expert on stress and resilience. How can we reduce stress and resilience? She said, well, how about through a meditation? And there's a beautiful meditation that's been shown to improve, reduce stress and improve resilience. And it's called loving kindness meditation. So let's test this out. Let's see whether we could engage people in a trial, randomizing some people to this loving kindness meditation where you're asked in your meditative state to wish people happiness and freedom from suffering, and do that for three months compared to a controlled condition where they were just a waitlist controlled group. And they followed them over time to see whether they

could actually influence telomerase this fuel that influences telomeres. And sure enough, it did. They found that people who were meditating, the meditation group had more telomerase than people in the control condition, the waitlist controlled condition, but there's an also an interesting wrinkle to it.

They found that the meditators were actually improving their purpose in life. And once you put purpose in life into this model, the meditation went away. It was the meditation improving people's purpose in life. And it's the purpose in life in turn increasing the telomerase, this enzyme that fuels our telomeres. So here we have some pretty, pretty strong evidence that you can improve purpose in life. And that the improvement in purpose in life has this very fundamental effect on every cell in our body that has DNA. And that would be over a trillion cells. That's a lot of them and they're all improving these aglets on their shoelaces, these telomeres to our chromosomes. So that's one little piece of evidence for what's going on, why people live longer and do so much better if they have a strong purpose. Here's another thing that we've been studying a lot.

We've been looking at this part of the brain called the prefrontal cortex. And this is a part of the brain that humans have more of than any other animal, chimps, dogs, cats, squirrel, monkeys, et cetera. We have a lot of it compared to any of these animals. By weight we have more than any other animal on the planet. What we'd like to do is put people into MRI. But you might have been in an MRI before, this claustrophobic machine that clanks real loud, but here's the difference. We clamp their heads down and we put little video cameras in front of their eyes, and we give them a little joystick so they can rate things. And then what we'd like to do is study different parts of the brain. There are two parts of the brain that are highly relevant here. One is what we'll call the - what is called the ventral medial prefrontal cortex.

So this is a part of the prefrontal cortex that is very special. It's very cool. Let's just call it the VMPFC for short, ventral medial prefrontal cortex. And this part of the brain is related to the self, it's related to the identity. When you're asking, who are you? Describe who you are. That part of the brain gets more active when we ask people about what they care about the most. Remember

we talked about purpose being values, goals that are set around things that we deeply value. When we ask people to think about what they deeply valued, more blood flow goes into this VMPFC. It also relates to emotional regulation, which we'll get to later. It's able to kind of help regulate if we disk. It helps us with more effective coping strategies. Importantly too, it also helps us build a future orientation.

For you nurses out there who are care managers, who are taking care of people, so often you might be helping a diabetic and that diabetic says, yeah I understand what you're saying about diet, but man, I love potato chips or whatever, and they're opening up to you and you go, okay, well, that's an immediate reward. Let's think about something deeper about the future. Do you want to be a good grandparent and a good mentor for your grandchildren down the road? Wow. That hits the person a little harder. That's hitting. When you're talking about that, it's hitting this ventral medial prefrontal cortex. And notice also these two little snake heads down here. I just did that metaphorically, but that's a very ancient part of our brain. That section, two little almond shaped parts of the brain, that's called the amygdala. Dinosaurs had amygdala. It's a very, very old part of the brain.

And that becomes active when we are scared, when we're afraid, when we're shocked, when we have some type of fear or aggression. If we're dissed in the day, somehow we feel slighted, if we get angry, if some car cuts us off as we're driving to work, whatever that is, if you're upset that amygdala starts getting more active. So what we like to do is, again, we put people into MRI and we have these little video cameras, and then we show them really scary things. We do that on purpose, showing them scary things we know will activate the amygdala. And what we find is within a second or so that amygdala gets a lot more blood flow. It's getting really active. And at the same time, this part of the brain related to ourself and our core values gets really small. So the thinking part of our brain, the decision-making part of our brain starts shrinking.

Just think about this with COVID. As soon as COVID hits, what do we do? We run out and buy AK 47s. We strip the shelves bare of toilet paper and all sorts of things. We're going, hey, I'm scared. I'm protecting myself. That's the amygdala. But for people who are resilient, within a

matter of seconds, that suddenly the amygdala shrinks this guru part of the brain, this VMPFC starts getting more active than ever. Essentially it's going, okay, what do I do about this? Isn't that amazing? I love this kind of research. This research is done with my colleagues, Yoona Kang and Emily Falk at Penn. And we've really been thinking a lot about this. What we have found is that this idea of core purposeful values, and this is a real scan of one of the brains where we're asking people to think about their core purposeful values, more blood flow in this ventral medial prefrontal cortex and less blood flow in this part of the brain related to fear and aggression called the amygdala, important.

How does that relate in the real world? Let me give you an example. This is a colleague of mine, Tony Burrow. Tony Burrow is at Cornell University and he's this amazing researcher. He wanted to study how this may relate to fear. So what he did was asking people to think, in one group, he asked them to think, what does it mean to have a sense of purpose syndrome? What's your purpose in life? Where did it come from? And then in another group, he asked them, what was the last movie you saw? Who were the characters? What was the plot? That's a control condition. Now, both groups then he put on the L. If you're in the Chicago area or been in Chicago, you might know what the L is. It's the subway there. And the subway, the main part of the L goes north and south.

And he sent people south where – and remember, some were thinking about – had just thought about their purpose, had written down for five minutes. Other people had just thought about the last movie they saw and wrote a little bit about that for five minutes. And he puts people on the L, head south, where people are increasingly at every stop, more ethnically diverse. And it's been shown in many studies that when you're around people who are not like you, who are more ethnically diverse, you start becoming afraid. And not everybody does, but on average people start becoming more afraid and nervous and tense. And so at every stop, he had them indicate just how nervous and afraid and tense they were. While at the same time, a research assistant on every car of the L of the subway was indicating recording how ethnically diverse the car was getting at every stop.

And by the last stop, here's what they found. They found in the control condition, what was the last movie you saw, what was the plot, who were the characters, on a scale of zero to seven, they were fives in terms of how distressed, alone and afraid they were. Look at the purpose affirmation group. Anyway, this is a five minute intervention. That's it. For you nurse case managers, or for people just thinking about this, think about your purpose more. It doesn't take a long time and suddenly you become less distressed, alone and afraid. Your amygdala isn't working as much. And your prefrontal cortex is more interested in getting more activated. So now, so I hope we're kind of getting a little feel for what purpose is doing neurologically. That's great, but you also may be asking, I think this is a really, really good question here.

Are all purposes the same? Does that make sense? And it turns out that this goes back to Aristotle. Aristotle started asking this question, are there different kinds of virtues that we have? Are there different kinds of directions that people can take? And they said, well, of course there are. There are two major kinds of directions. And in terms of one of them, he said, well, one direction might be what we might call hedonic purpose and direction. And we're all familiar with hedonism, right? I'm going to take a quick drink of water here. We're familiar with hedonism where this is related to pleasure. It's good food or good wine or good sex or nice vacations or whatever it is, and those are good things. And Aristotle said, hey, by the way, that's okay.

I don't have any problem with hedonism. That's fine. But if that's all we were, then we would be like, and I quote him from his Nicomachean Ethics, then we would be like grazing animals. And he said, there's an alternative form of well-being, an alternative form of purpose. And he called that eudaimonic. So you might've heard that term before, but very likely you have not heard of that term before. And the central word in this, the central root in it is daimon, D-A-I-M-O-N. And in Greek, that means true self or godlike self. So eudaimonic means being in touch with this true self, this godlike self that the Greeks believed you were born with. By the way, if you're Hindu or Buddhist, you might call this the atman where Hindus and Buddhists believed that you were born with this true godlike self that they call the atman. And over time, it's society that kind of messes with us and it's kind of your job to protect that atman.



Here the Greeks also got the exact same thing. We need to protect that daimon and stay in touch with that daimon. And if you have this eudaimonic well-being, you're thinking about transcending things, things bigger than yourself, not just the immediate pleasures of the world, but think about these bigger transcending ideas. So just as an example now, by the way, that was 2,400 years ago that Aristotle wrote about this. Now let's go to the latest modern genetics and epigenetics. So the lead author here is Barbara Fredrickson. She is awesome. She's at the University of North Carolina. And she along with a whole group of other great researchers started looking at this Aristotelian concept of a hedonic form representing, this comes right from their abstract, the sum of an individual's positive aspect of experiences and a deeper eudaimonic form, a purpose that results from striving toward meaning and a noble purpose beyond simple self-gratification.

So over here, that's Barbara Fredrickson. And what they looked at was gene expression. And they are looking at gene expression, I just showed you that quote, looking at gene expression of antibodies and antivirals. Sure enough, the eudemonic people had greater expression of antibodies and antivirals. That's what we want. We want that in a pandemic. We want that in life in general, also greater expression of type one interferon. We want that. Also lower expression of pro-inflammatory cells. Again, we want that. If we have eudaimonic well-being, we tend to have those expressed in a positive way for our bodies. And if we are hedonic, we tend to have those expressed in this very, very negative way. This study by the way, at first people are like, what, are you sure about that? It's now been replicated three times, including in Japan among employees in a technology company.

Another study, we talk about loneliness a lot lately with this especially among older people. They are - it's just basically a pandemic of loneliness as well one might say? So Steve Cole, who was one of the authors of the Fredrickson study, he's at UCLA, amazing researcher. He has this fairly complicated title here, Loneliness Eudaimonia and the Human Conserved Transcriptional Response to Adversity. Well, what he found was very similar. He found that people who are lonely also had that negative gene expression of more pro-inflammatory cells and less antivirals.

But what he also found is that if you had a purpose, purpose seems to buffer the effects of loneliness. And here's what he says, eudaimonic well-being may have the potential to compensate for the adverse impact of loneliness on this type of gene expression, finding suggested novel approach to targeting health risks associated with social isolation, maybe by promoting purpose and meaning in life.

I don't think about that so much, do we? But here we are. And we have this gift today thanks to Optum's[?] that we're just now sitting back and we're able to learn about this a little bit more, hope you're enjoying this so far. So we've been doing a lot of work at Kumanu. I'm the chief purpose officer and CEO of Kumanu. Kumanu by the way is Māori for nourish and cherish. And I love that because the Māori indigenous people of New Zealand are a very fierce people. If you've just looked at their rugby teams, their women's rugby team won the Olympics this last year. They are very fierce, but they have this beautiful word Kumanu, which means nourish and cherish. And so we decided to call our company Kumanu and we're working closely with the Harris poll. The Harris poll has these big national polls, and we'd locked in with that.

And so we've created now quarterly a purposeful with the Harris Company. And what we found, first of all, we wanted to find out, does purpose change by age? Sure enough, it does. As you get older, you tend to have a stronger purpose. And 51% of people had a strong purpose, and by strong purpose, I mean, on a scale of one to 10 of how strong is your purpose in life, they were sixes or sevens, so we called that strong. 51% were there compared to in the 30s for people who were younger. We also ask people, okay, can you write a statement of purpose in your life? Boy, that's kind of pushing it a little bit. Isn't it? Can you actually write a statement of what your purpose is? And 72% of people were able to write a statement. That's pretty cool, more so again, than younger people.

So this is suggesting to us that people 55 and older really are starting to think about their purpose highly relevant in this particular population. Also, when we take a look at whether people are able to use effective coping strategies to help them out, we'll get to what that means in just a second, but are they using effective coping strategies? If they can write a purpose statement, and if they

have a high purpose in life represented by this this little thing, PIL, so high purpose in life, and they can write a statement, they were much more likely to be using effective coping strategies than if they had a low purpose in life and – or could not write a statement of their purpose. Now, then we've started studying that further. We've looked at all the statements. We've got thousands of people's purpose statements, and we're able to take a look at those and we're able to break them into and categorize them into four basic types of purpose.

And these are people who are 55 and older. We wanted to just see what's going on with them. And we found that many people, as you might say talked about their family in their purpose. And that was pretty much the focus of their purpose and their life. I'm here for my kids, my grandkids, my family, take care of them, provide for them, be a mentor to them, be a good husband, be a good mom, whatever. Then there are kind of hedonic people, I'm here to enjoy life. I'm here to get my retirement. I want to have love. I want to basically be financially well off. I want to make sure that I use my money to the fullest extent. So you see that, that's more hedonic, right? Again, Aristotle said, that's not a bad thing. It's just that if that's all we were we'd be like raising animals.

Then there are people saying, I'm here to improve myself, especially as I'm moving toward retirement. I really want to make my life richer and fuller, but through self-improvement, self-growth on improved life. Health in a way and improve my mental status, my well-being, I want to learn more, I want to take courses, blah, blah, blah. And others focused on what I might call a transcendent purpose. I am here to help other people. I'm here for others. That goes even beyond my family. I'm here for my community. And a lot of people talked about God and religion in this case, not everybody, but a lot of people, certainly these people were talking about something bigger than themselves. Okay. Now we want to find out what's happening there. It turns out that in terms of using coping strategies that are really effective in things like a pandemic or when you're dissed or when you're cut off by another car on the highway or whatever, you use effective coping strategies the trans senders were far more likely to be using effective coping

strategies than people who were just into growth or family, or hedonic purpose or could write no statement at all.

So we wanted to follow up on that. We started working with this guy named Ethan Kross. Ethan Kross just wrote a fabulous book. I'm going to highly recommend it to all of you. It's called Chatter. And this is just such an awesome book, The Voice in Our Head. Do you have voices in your head? I do. Why it Matters. And did some of those voices say, hey, you're no good. You're not good enough or whatever, or do they freak out? They get scared easily and you see the next line, and how to harness it. So Ethan Kross is one of the world's experts in this area. He runs the emotion and self-control lab at the University of Michigan. And he has over 200 studies in here, amazing experiments that went into this too, not just talking the talk, but really studying interventions to help people manage emotion.

And here's what - so we started working together. And through the Harris poll, what we first decided to do is ask people about their coping strategies. And so we asked his standard set, like, do you drink alcohol, or do you eat a lot, or do you vent or do you try to tamp down and hide your anxiety? Or do you see a big picture? Do you try to find a silver lining? Do you know this won't last forever? Do you engage in a family or religious ritual, or do you take time to walk outside in nature, whatever? And we took a look at the correlations between these and purpose in life. And so this represents an ordering, a simple ordering of how these coping strategies were associated with a strong purpose in life. What you see right away is that people with the strongest purpose in life were able to see the big picture.

That's a coping strategy they're more likely to use. Whereas those same people were less likely to drink alcohol as a coping strategy for stress, they were less likely to vent than they were to see a silver lining or to know this won't last forever, or to engage in a family and religious ritual. You see the coping strategies on the right, they tend to be kind of purpose related in your mind. Don't they? I mean they sure do with me. And then we compared that with how good are they at regulating their emotions? And by emotional regulation here, I'm referring to your ability to change your own weather. So if you're cloudy and stormy and dark, can you turn clear and

sunny and breezy, calm? And here's what we find. We find that the people who are using those coping strategies on the right, who also tend to have a stronger purpose in life are also better able to regulate their emotions.

Think about that, go all the way back to our brain science. When we were showing people with a strong purpose tend to have more blood flow in the prefrontal cortex, which actually down regulates and kind of tamps down this amygdala, this fear center. And by the way, when we then look at emotional regulation, can I change my own weather pretty rapidly? Those people are also more resilient. So you see how all of those things are connected. And to connect the dots just a little bit further, I'm going to show you a total eye chart. This eye chart, which please don't even look at this too long. It's crazy. This is a structural equation model that's looking at all the variables I've been talking about only in much greater detail, literally looking at the specific questions that were asked. And we can take those questions out and we find a model. And I'm just going to make this model a little easier to look at, this exact same model.

And then I'm going to straighten it out a little bit so we can see it because I want to explain it. So it turns out that purpose in life is related to our intrinsic values, as opposed to extrinsic. As we said before, these intrinsic values are deeper, are more a part of us. Extrinsic values might be money or fame or attractiveness. These intrinsic values are more like personal growth, the things that we've been talking about. That relates to a stronger purpose in life. That's stronger purpose in life in turn relates to emotional self-regulation, ability to change our own weather and greater future orientation. I start looking at the bigger picture. I add this purpose in life, and I'm better able to do that. And both of those things in turn relate to greater resilience, our ability to manage stress and cope with stress in a bigger, more fundamental, ongoing, chronic way.

That's what we really want for people who are having problems right now. I hope that's making sense so far. So right now, we're going to shift gears and we're going to talk about finding purpose which is really important. How do I find my own purpose? I know you've convinced me that purpose is important, and now you even elucidated a bit about why purpose is important and how it's important. That's great. I'm bought in, but how can I find a stronger purpose or how can I

help my patients find a stronger purpose? I'm going to make this really easy for people. I'm going to have you think about seven questions. What matters to you most? Who relies on you? By the way, who relies on you? Maybe that's your patients. Maybe it's your mom, maybe it's your cat, who cares? Whatever, whoever relies on you that you care about, you can build a purpose on that.

And it's your life, people who rely on you, not me. Who inspires you? What causes do you care about? What are you grateful for? I have a ritual every morning where I get a cup of coffee and in my PJ's, I open the front door and I walk out on the front step. And I just think about what I'm grateful for. And I spend maybe a minute out there just thinking about that. That turns out to be really good for you. Maybe you could build a great gratefulness ritual. What gets you out of bed in the morning? Do you get out of bed just thinking, oh man, I can't wait to get these really cool things that I need to do and I better be my best self in this case. And I better really try to adhere to this deeper purpose that I have.

And then, this may sound dark, but it's not. How do you want to be remembered when you die? What do you want on your headstone? What do you want people to say at a Memorial service? Jonas Salk who developed a polio vaccine in his later years said we should all be good ancestors. He's saying we should look back on ourselves, maybe 200 years from now and say, wow, that was an awesome person. That was a great ancestor of ours. We're so proud that we had this person as an ancestor. How would you want to be remembered? Those things, what matters most, who relies on you, who inspires you, what causes do you care about, what are you grateful for, what gets you out of bed and how do you want to be remembered? Just think about those things for a second. I'm going to tell you about mine.

So in my own life, these are the things that matter a lot to me. I want to be a family man, because I have a big family up to 90 year old parents. I have grandchildren. I have a lot of things. I have a spouse, but all these people, I want to be a family man. I want to be a seeker of truth and a researcher. I want to be a great teacher. I want to be a supporter of the arts, especially locally. I want to be a visionary leader of Kumanu. I want to be a friend. I want to be fun-loving. I don't

just want to be a boring person that talks about purpose all the time and that's it. I want to have fun in my life. I want to help people get out on the dance floor a little bit. I want to be globally engaged.

That forms what I call my big goals because I'm here to be those things. And from that, it forms my purpose. I'm here to be a family man, a visionary leader, a friend and teacher, to be a seeker and supporter of truth and beauty, to help the world become more purposeful and to get people out onto the dance floor, metaphorically saying, don't wait for somebody else to give you a purpose, get out on the frigging dance floor and dance. And it's your dance. And if people think your dance is odd or weird, who cares? It's your dance. It's not their dance. Let them dance the way they want but you dance, and hopefully with a bunch of people, you all have a great time. So when I think about that, if I were to die today, I hope one of you, at least calls the cemetery saying, this is what Vic wanted on his headstone. So it's just that important, by the way.

When I think about those big goals, I think, wow, okay, those are fine. It's nice to have a purpose, but how do I become purposeful? To become purposeful, I need to start thinking about what am going to call do goals. In order to be the person I want to be, I need to do certain things like remaining calm or being a broader thinker or being energetic for my students because I have a lot of students, being positive, being a good listener. You see these do goals, they also see to some extent, a little, they agree about do goals, calm. What does that mean? I mean, I'm sure you nurse coaches out there somebody might say, well I want to lose weight, or I want to be calm. And you're going okay, well, there are 15 ways to be calm and 20 ways to go on to lose some weight.

So we need something more than just do goals. And we don't want people just sitting in the do goal fence because it's not specific enough, it's not crispy enough. So what we do is help people with what we call action goals. So there might be a loving kindness meditation. There may be a way to a game to make me a better listener. I might take dance lessons to be better connected, to be more fun-loving. There are all sorts of specific, crispy behaviors that I can turn into habits that start making me a better person that makes me more purposeful, but I need these action

goals so I can do the things I need to do to be the person I want to be. Let me give you an example or two. You see, by the way, there's kind of a why in addition to the how, it's not just about how to do this.

So if you're a nurse, counselor, coach, a case manager, I hope you know that you're trained in all the house, your ton of house, right? Go back to the why, go back to why they're doing this in the first place and you will see bigger behavior change. If you go back to that purpose and help that person build greater purpose, that person's how will help manage the why - that person's why will help manage the how. Let me give you a couple of examples as we're kind of wrapping up here. This is an actual student that I had, and I'll describe her be goals. First of all, her be goals and her purpose were to be a healer and leader of a team, helping the sick and dying and to serve God. She's a very religious person. After getting her Master of Public Health degree, she went to Sub-Saharan Africa to work with people who were really sick.

And so in order to do that, she wanted to be a person who serves God, right. To do that I can stay in touch with God. But what does that mean? How do you do that? That's a little vague. So you've probably guessed it, to stay in touch with God she decided that prayer would be her action goal, the crispy behaviors she can engage in regularly throughout the day to stay in touch with God in order to serve her God. She also wants to be a healer and leader. How's she going to do that? Well, she needs energy to do that because she has a lot of patients in Sub-Saharan Africa where she's working. And to have more energy, she needs to sleep well and she needs to eat well. Also to be a really good healer, she needs empathy for her patients.

And to do that, she's taken an active listening course to learn more how to actively listen to her patients. So this woman lives a big life, she leads a purposeful life, and she knows how to give herself the energy she needs, the empathy she needs, and also to stay in touch with her God. That is a big life that she is serving. Also what this does is take away all the energy that is wasted on social media or gossip or other junk that's in your life. That just distracts a person. Here's another person who has worked with me, a leader of a laboratory. She wants to be a strong woman, find new discoveries to help others and to be a loving partner. And so this is her



purpose in her life. This is her purpose at the time, by the way, purposes can change, but this is her purpose.

And to be that strong woman, she needs to be physically strong. That's what she's decided. So she drinks six glasses of water at least a day, hydrates. And she also is an awesome kick boxer. She takes kickboxing lessons. And so she is amazingly strong, and she is a strong woman physically as well as mentally. She also to be a scientific leader wants to be both disciplined and open-minded, so she's taken - learned more about time management. She engages in that, and she also meditates every day. In addition to that, she wants to be a loving partner. So to be a loving partner, this couple takes tango lessons. And I just think that's so awesome. So they take regular dance lessons so that they can be loving so that she can have this bigger life. So that's what I mean by deed goals, do goals and action goals.

So, as I said before, there are over 1,000 studies that have looked at purpose in life, very few interventions. And in fact, so many of these studies, the study that we did a while back we said, yeah, we've found that people with stronger purpose in life are more likely to get mammograms and colonoscopies and cholesterol tests and they spend fewer nights in the hospital by a long shot. We need intervention studies now. We need interventions to help people build more purpose so that they can manage their glucose, or we need more studies around all sorts of things, how to basically reduce hospitalization among older people. So we created a Kumano based application called purposeful, and it's a simple digital application. And I'm not showing this other than to say you can improve purpose.

We have found that through purposeful. Other people have found that they can improve purpose. We want to do it in a really simple way. And I just wanted to show you our design and our philosophy for what we're doing. So we help people asking, what do you want to work on in your life? It's not our life, it's yours. And tell us more about your life and then tell us about your roles and what you're like when you're at your best. So they'll indicate that. And then we ask people about their purpose. And if they don't know right away, that's fine. We say, look, that's no problem. We have a whole quest, a purpose quest, a way to help you find your purpose using

those questions that we've asked before. And then every day we start asking how they're feeling. And we're able to find out a little bit more about their emotions and whether they are able to manage their emotions better or worse.

And we give them tips on how to do that. And we ask whether they're bringing their best self and how purposeful they are and to become a little more intentional every day, a little more purposeful every day. And this kind of application, this kind of intervention has been shown now, we found and other people had found works really well. Not only in improving your purpose, but then in turn, reducing your depression rate, reducing your anxiety, improving your health behaviors. So you may think, wow, what Vic has talked about this hour is not what I've been, not what I learned in nursing school or not what I learned in med school or other places. And probably chances are likely you haven't. We know off a lot, I'm trained in a lot of different things, but I still haven't learned more about how a person can just live a more purposeful and directed life.

This is not new. John Paul SART long time ago in the early 1900s - by the way that John Paul start is on the left, his partner for life SIM on debug law is on the right. They were kind of the father and mother of existentialist philosophy. And they talked all about having a purposeful project. They called it being involved in something that's active and becoming more purposeful. And it's funny in the early 1900s, he said everything's been figured out Simone, we know so much about physics and astronomy. We know a lot about biology and medicine and science and all that stuff, everything's been figured out except how to live. And I think that's the most important thing because quite honestly, I still don't think we've learned how to live. I teach a lot of students in the last 10 years we've seen depression rates double amongst students, even before COVID, even before COVID it had doubled, suicidal ideation has doubled. It's just sad.

We are increasingly having a hard time and COVID hasn't made it better. Now depression rates have tripled through COVID and it's all - we live in these confined spaces, but not just physically, we live in these confined spaces mentally now, and we need to transcend that space somehow. That little skull that we have, we need to somehow transcend with this bigger purpose that we have in our lives. And that's why I'm here. That's my purpose to help other people find, develop

authentic purposes in their lives, this new direction. Because I think when that happens, really good things happen to you physically, behaviorally, mentally. I want to thank the people that I work with too, because this isn't just about me by any means. There are some amazing transcending researchers, and I don't know if you notice this, but the diversity of these people is incredible. The diversity in terms of age, in terms of ethnic status, gender, they're just amazing people doing research in this area, and I'm really, really blessed to be with them. And I want to thank them, and I want to sincerely thank you as well. So I'll stop there, and I can answer any questions. Hopefully I can answer them. And if I can't, I'll let you know.

Rebecca Gleason: Thank you. That was an excellent presentation. I do have a few questions here. And one of them was how all this relates to older people who some that don't have very long to live and how that office is.

Victor Strecher: Yeah. Oh, it's great. I write about this in my book, *Life on Purpose*, where they had studied people in hospice for example who are dying, and they ask people about their lives. And so many of them go, wow, I have such a different perspective on my life now than I did before. I now know more about love and about caring. And I wish I had known that earlier in my life. So some people, their purpose is to make a lot of money or to have a bigger car or house or a trophy spouse or whatever it is. And those people then as they're dying go, that's not the important stuff. The things that are most important are not things, they're people, they're causes, they're things that I wish I had spent more of my time, more of my life thinking about. And what I'd love to do, if you guys are - if any of you are in hospice care or taking care of much older people, consider the idea that a person's purpose at that stage might be to help mentor younger people with just those kinds of messages.

And I know younger people may go, grandpa, I know you always talk about this, but maybe this is the gift that they could leave them. Maybe this is a gift in that last chapter of their life that they could talk about with their family. Maybe even thinking about a family purpose and a legacy that the family could leave. So I really believe in purpose in older age. And I think it's very, very helpful for people who are going through those last steps and thinking, well, what will people say

at my Memorial service? And maybe they're not proud of what people will say, or maybe nobody will even be at a Memorial service and then maybe they want to express some of that to their children and their grandchildren. I hope that kind of answers that question.

Rebecca Gleason: That was a very good answer. Another person, obviously they thought that this was an amazing presentation and they want to know what you would suggest is a first step that anyone can take to become more purposeful. Are there any readings that you suggest?

Victor Strecher: Yeah. One great book is Viktor Frankl's, Man's Search for Meaning. It's a book. And I'll just tell you, give you a very personal story. About 10 years ago, my daughter, Julia passed away very suddenly and unexpectedly of a heart attack. And she was in nursing school actually at the University of Michigan. And when that happened, I kind of lost my purpose in life, which is more focused on family. And somebody sent me this book, Viktor Frankl's Man's Search for Meaning. And when I read it, it was almost like he was writing a letter to me. He had gone through three concentration camps, imagine having nothing, truly nothing and watching. And his family was murdered in the camps as well. But he found being a physician and he ended up being a physician in these camps, helping prisoners.

He was also a prisoner himself, but he found that people who lost their purpose were more likely to get sick and then die. And he studied that pretty carefully. I think that's a, it's a fabulous book, Man's Search for Meaning, very easy to read. If you do want a more modern book that is trying to do something like that, you might consider my book, Life on Purpose. If you want a comic book version of it, a graphic novel, I wrote this book called On Purpose, and you can get those through Amazon pretty easily. So those are maybe places to start. Also think about the seven questions I asked that begins with what matters most in your life. You might want to write that down. Ethan Kross has a wonderful little tip for people on managing emotion. He says when you're really down, when you're really having a hard time and by the way, I was having a very, very difficult time after my daughter died.

Victor Strecher: I sat down and I started looking at myself, looking down on myself, saying Vic, you're in really, really rough shape, and you're not going to be on this earth much longer if you continue on this path, and you're going to need to help yourself. And I was talking to myself I found in a second person as if I was looking down and I was my own therapist. That turns out to be one of the most effective strategies for building greater emotional regulation. When you literally talk to yourself as if you're a therapist for you. You know yourself more than anyone, start talking to yourself that way, and you can be honest with yourself. So you might think about those ways of starting. I hope that's helpful.

Rebecca Gleason: Thank you. Thank you for sharing that. Another question is that in one of the slides that mentioned purpose in life score, how is that assessed?

Victor Strecher: Yeah. Great question. There are a number of purpose in life questions. A typical questionnaire, the classic one is developed by a woman named Carol Ryff. And we've worked with her before, she's at the University of Wisconsin, it's called the risk scale. And I believe it has six items and there are questions like, do you have a strong purpose in your life? Another question is some people wander around aimlessly. I'm not one of them, and questions like that. And you put those together in that form so purpose score. So yeah, that's a typical way to do it. Other people ask single item questions. We typically like multiple questions, and then we add them together, put them into an index averaging those out. And that tends to be a little more valid, reliable scale.

Rebecca Gleason: Thank you. How can this work with severe dementia?

Victor Strecher: Hard if you have severe dementia, but caregivers purpose turns out to be really important in this case. So if caregivers can start creating an identity around a caregiving identity and purpose, those caregivers seem to cope better when coping with individuals with depression - I'm sorry with dementia, I'm sorry. Now, if you have a milder form of dementia, the same people, this is a study done at the Rush Alzheimer's Center in Chicago by Patricia Boyle. She found that people with some degree of dementia who have a strong purpose progress 30% slower, their

dementia progression is 30% slower than people with a weak purpose. I mean, imagine if that was a drug, it'd be an amazing drug. If it was in our drinking water, we'd all be drinking it. So it does help. But if you personally have severe dementia, it probably is difficult to develop a purpose. Although I will say too, I don't think there's any research on this. So who knows?

Rebecca Gleason: Thank you. The next question is how do we help patients or friends start to identify their life purpose who haven't thought about it?

Victor Strecher: Yeah. Again, a good step, start thinking about what matters most in your life, write it down. Write those things that matter most, write down who relies on you, what causes you care about, what gets you out of bed in the morning? And again, this may not be something big. A great physician once said, who was at the University of California, San Francisco. She said, sometimes purpose is just developed by turning around and seeing the person right next to you. Maybe it's the person who you work with. Maybe it's your spouse or partner, maybe it's your child, but you see, this doesn't have to be something involving going to India, to Himalayas and meditating in a cave for six months until somehow you find your purpose. This is more looking around in your daily life, finding out, thinking a little bit more carefully about what matters most in that life and your life and then saying, how could I set a goal around that?

For me and my students, after my daughter died, I called the University of Michigan and said, I know you've given me the next year off if I need it. It was amazing. They were so nice. They said, you lost your daughter suddenly, it's horrible. And we know how you're having a hard time, take as much time as you need. And I called them back after this kind of little epiphany that I had and writing down what matters most. And I wrote down my students somehow, I just found myself writing it down. And then I said, wow, I need to teach as soon as possible. And I'm going to teach a new way of thinking about health, not just in terms of the absence of disease and death, but how to live a bigger life because isn't that what health is all about?

And so I decided to teach a course on how to live a bigger life as I do now, and I'm going to teach every student as if they're my own daughter. Now, in order to do that, I need energy. So I walk

to work every day. I meditate every day, I try to sleep well every day, I try to be creative every day, I try to eat well every day. I do things that gives me more energy every single day to help live this bigger life of having greater purpose. And it's paid back so much more than I've put into it. It's not even funny over the last 10 years.

Rebecca Gleason: Thank you doctor. That was an excellent presentation. We are at the top of the hour. And to respect everyone's time, we would like to thank everyone for joining us and conclude the activity. And I don't think that there is not enough words to say how valuable this information has been to a lot of people.

Victor Strecher: Thanks. I have one real quick thing to say, too. If you are interested in more of this, I have a massive open online course. It's free to take. If you go to Coursera, [coursera.org](https://www.coursera.org), it's a University of Michigan course that I built just before the pandemic actually, and it's called finding purpose in life. And it's really easy to find. It's a four week course. It's real simple. It gets into great detail, much greater than this course.

Rebecca Gleason: Thank you. Thank you for sharing that.

Victor Strecher: Sure.