How positive age beliefs can support positive health outcomes with Becca Levy, PhD

AMA's Moving Medicine video series amplifies physician voices and highlights developments and achievements throughout medicine.

Featured topic and speakers

In today’s episode of Moving Medicine, AMA Chief Experience Officer Todd Unger chats with Becca R. Levy, PhD, a professor of epidemiology at Yale School of Public Health and a professor of psychology at Yale University in New Haven, Connecticut, about how our beliefs about age influence health.


Speaker

- Becca R. Levy, PhD, professor of epidemiology at Yale School of Public Health and professor of psychology at Yale University

Transcript

Unger: Hello. This is the American Medical Association's Moving Medicine video and podcast. Today we're going to discuss how beliefs about age influence health. Our guest is Dr. Becca Levy, a professor of epidemiology at Yale School of Public Health and a professor of psychology at Yale University in New Haven, Connecticut. Dr. Levy is also the author of a best-selling book called “Breaking the Age Code, How Your Age Beliefs Determine How Long and Well You Live.”
I'm Todd Unger, AMA's chief experience officer in Chicago, and I am really interested in this particular topic. Dr. Levy, thanks so much for joining us. I've heard many physicians, like so many others, complain that they are forced to confront negative stereotypes as they get older, particularly if they continue to practice medicine. Do you think that ageism is a problem in the U.S.? And why don't you just start first by talking about how you define ageism?

**Dr. Levy:** OK, great. Thank you. And first, let me say thank you so much for having me on your show. It's great to have this conversation with you. So starting off with how ageism is defined. So I like to use the definition of a physician, Dr. Robert Butler, who defined ageism when he actually observed it in his own medical school experience. And he also noticed it in housing, a complex near where he lived, which denied older people a chance to live in a housing complex because of their age.

So he defined ageism as the systematic stereotyping and discrimination of people solely based on their age. And he defined it 50 years ago but, unfortunately, it is still alive and well. So for example, in a recent study that was conducted at the University of Michigan, they found that 82% of older individuals reported experiencing ageism in everyday life.

**Unger:** What do you think is driving this?

**Dr. Levy:** I think there are a number of factors that are driving it. So they're both structural factors and individual factors. So the structural factors include age segregation. So in our country, we've gone from being one of the most age-integrated cultures/countries in the world to one of the most age-segregated cultures in the world. And we know that ageism can lead to the age segregation. And then, age segregation can, in turn, increase the ageism.

We also know that there are a number of industries that profit from ageism and negative age stereotypes and negative age beliefs. So I had a professor who once said to me that when you want to try to understand what's happening in a society, you should look to see who profits. And we know that there are companies, such as in advertising, in social media and also in the anti-aging industry, which generate a trillion dollars together of profits in part by denigrating aging and creating a fear around aging.

Which creates a desire, they believe, to go out and take on these products that actually battle aging or have this advertising campaign around aging as being something that we should fear and try to overcome, and it's something that's negative in our society. So those are some of the structural factors.

And in terms of the individual factors, we know that there are aspects of how individuals take in age beliefs. So we know that children as young as age three take in the age beliefs of their culture. We know that then they're reinforced over time. And we also know that they can operate without our awareness. They can operate implicitly. So that's another way that ageism has increased and seems
to be quite prevalent today.

**Unger:** I think all of those advertisers have personally identified me in my Instagram feed. I'm curious, what are the most common misconceptions that you hear about aging?

**Dr. Levy:** So, yes, that's a good question. And in the book “Breaking the Age Code,” I present about 14 of the most common negative age beliefs about aging. And with each of them, I looked into the science and found that, for each of them, there's a reason that they're not true. And also, there is a strength that we can find in the science that's related to aging in some of the ways that the negative messages actually target.

So to give you one example, perhaps the most common negative age belief is that all types of cognition decline in all older people. But the science shows that just isn't true. We know that there are many different types of cognition. So for example, procedural memory, the ability to remember how to ride a bike, that is something that's maintained.

And also, there are some skills that actually improve in later life. So there's evidence, for example, that the ability to use metacognition, which is actually the ability to think about thinking, tends to improve in later life. Another skill that there's evidence that increases is pattern recognition, which is actually a skill that could be quite useful for the physician audience. So there's a number of skills that actually improve.

And then we also know from my research that some of the types of memory that we think automatically decline in later life, with the right types of interventions, such as strengthening positive age beliefs, we can actually improve those types of beliefs. And if you want, I can tell you a quick story about something which is related to this.

So in writing the book, one of my favorite things was actually interviewing different people. And I interviewed this 84-year-old retired actor who decided to take on this wonderful memory feat. So he decided to memorize this 60,000 word poem. And he took on this feat. And it's actually about the size of a novel.

And he was able to take on this feat and actually successfully memorize the poem and then perform it. And he said that, for him, what really inspired and motivated him was his own positive age belief. So he thought about this cellist, Pablo Casals, who played beautiful sonatas in his 80s and 90s. And so, this positive image of aging inspired and motivated him to be very successful in his cognition.

**Unger:** That's a great story. When you think about our audience out there, a lot of physicians who are listening and watching this, how have you seen ageism impact people in the medical profession in particular?
Dr. Levy: Yeah, so that’s a good question. So there have been some research about the types of ageism that people are exposed to as they go through medical training. And so, unfortunately, one study found that as individuals went through medical training, their ageism actually increased because of some of the training that reinforced some of the negative messaging. So I think that’s one thing that happens.

But also, as people take on the medical profession, there’s ageism that older physicians report. So for example, in writing the book, I had the opportunity to speak to this semi-retired pediatrician named Jonas. And he’s this wonderful diagnostician who teaches diagnosing skills to incoming medical students. And he told me how he felt in his own medical career, that as a young medical doctor, he was treated, as he called it, a young fuddy-duddy, who didn’t know much. And then as he got older, he was treated as somebody who no longer was useful or valuable to his patients or to the field. So he said there was actually—unfortunately, in his own career, he felt like there was only about a decade or so where his skill level matched the respect that he was given. And he talked about how he had faced a lot of ageism as he got older.

But he also mentioned to me that in his own life, he switched his beliefs about aging. So he started out in medical school having a lot of negative beliefs about older doctors. But then he said as he got to know a lot of older mentors in his field, he realized that there was just a lot that he was learning from them in both their pattern recognition and their knowledge but also in some very important skills, like compassion and kindness toward patients.

Unger: Well, let’s talk a little bit more about this issue around beliefs because that can have a big impact. You actually pioneered a field of study that looks at how our beliefs about age affect our health and longevity, which is not something I would have thought about. What made you kind of move in this direction of your research?

Dr. Levy: Yes. So thank you for that question. So I first became interested in this topic when I was still in graduate school and I had the opportunity to go to Japan. And I received a National Science Foundation fellowship to study why it is that Japanese, at the time, had the longest lifespan in the world. And the first thing that I noticed when I arrived in Tokyo was how differently older people are treated in Japan than some of the ageism that I was used to observing in the United States.

And I became really interested in the idea that perhaps this messaging, the way that meaning is ascribed to aging itself, could be one of the factors that was driving the longevity advantage. And so,
when I got back to the United States, I tried to figure out different ways to study this and have found quite a bit of evidence that, in fact, these cultural age beliefs can impact aging health.

**Unger:** Well, I am eager to learn about the results that you found through your research, which you’ve captured in your new book. Tell us, what are the top takeaways about this connection between your beliefs about aging and your health itself?

**Dr. Levy:** So right. Actually, as I said, so when I got back from Japan, I tried to think about how to actually study this. How can I actually study whether these age beliefs that exist in a culture can have an impact on aging health? And so, I've actually conducted three different types of studies. We used three different types of methodologies.

So one is longitudinally. So we've been able to look at people over time. So look at their baseline age beliefs and follow their health patterns over time. I've been able to conduct cross-cultural studies. So I've been able to look at cultures that hold different types of age beliefs and then examine differences in aging and health associated with those beliefs in different countries.

And then the third is, I've been able to conduct experimental studies. So following a randomized clinical trial design, we've been able to randomly assign people to a positive age belief condition or a negative age belief condition. And what we found in our studies, across these different methodologies, is there's these complimentary findings which show that these age beliefs can contribute to many of the aspects of aging health that we normally think are only due to genetics or biological factors.

So in fact, we have found that these age beliefs can, in part, also influence a number of different outcomes in the direction such that if they take in more positive age beliefs, we see improvements in cognitive health, in physical health, such as recovery from disability and also in mental health—so outcomes such as depression or anxiety. So if people take in more positive age beliefs, we see an advantage in these different types of health outcomes.

**Unger:** When you think about this impact, I mean, how deep does it go? Are these beliefs strong enough to affect our genes?

**Dr. Levy:** That's interesting that you asked. So we actually just looked at a study in which we were able to look at people who had the risky gene for developing dementia APOE4. And we used something called the Baltimore Longitudinal Study of Aging. And we were able to look at people who were free of dementia at baseline and then we followed them over six years to see whether they developed dementia.

And we found that even in this high-risk genetic group, who have a likelihood of—have a higher risk of developing dementia, if they take in more positive age beliefs, they actually, we found, had a 40% reduced risk of developing dementia. And in fact, what we found was that their risk of developing
dementia was as low as people who are not born with that risky gene. So, I thought that was a hopeful finding.

**Unger:** Is there kind of a set of statements that represent these kind of positive beliefs that you study? Like, where do you begin with something like this? If we know it can have such a huge impact, what should we start doing now?

**Dr. Levy:** Right. So I think, ideally, we would look for structural changes. So we would look for ways to change our society so it's more age-just and there's less ageism, fewer negative age beliefs to navigate. And I think there's a number of ways that we can do that.

So for example, actually something that I think physicians could be really active in, is we could take on a campaign based on, that's modeled after the anti-smoking campaign, in which a lot of health care providers share the evidence that cigarettes could harm our health. So I think we could do the same thing with these negative age messages and spread the word that negative age beliefs, there's a lot of evidence that they can contribute to bad health outcomes. So I think that there is definitely some messaging that can be done on a societal level to bring about change.

And there also are a number of evidence-based tools that people can take on an individual level. So until we get rid of all of the negative age messaging and ageism in our culture, it's, I think, important to also give people the skills to resist and challenge the negative age beliefs and try to strengthen the positive age beliefs. And in the book, I developed about 14 evidence-based tools that people can take on right away. So if you want, I can describe one of them.

**Unger:** Sure.

**Dr. Levy:** Which is age-belief journaling. So that's one of the ones that we found is particularly powerful. And what that involves is for one week writing down all the messages about aging that you encounter—whether it be on social media, whether it be in reading a magazine, seeing advertisements, whether it be talking to a relative or overhearing a conversation in a coffee shop. So every time you hear a portrayal of aging, write it down and then write down whether it's positive or negative.

And if it's negative, take a moment and think, could there have been a different portrayal of that older person? So if you watch a show and it's a particularly awful depiction of an older principal, you can ask yourself, well, could there have been a different type of principal who was actually a good force in the lives of the kids? And so that act of questioning some of the negative portrayals we found is very powerful

And the third part of this is actually to notice when older people are absent from messaging. So we know if you don't see a certain group represented in the media or around you that that can lead to
marginalization of that group.

So I think those three activities of marking portrayals of aging, marking if they're positive or negative, questioning the negative and then looking for absence of portrayals, we've found can be quite powerful in shifting peoples' taking in and challenging those age negative age beliefs.

Unger: These kinds of activities and the system level or structural type of changes that you're looking at, is this what you mean by the term "the age liberation movement"?

Dr. Levy: Yes, exactly. So the age liberation movement, as I describe it, is a movement, which I think there are signs that it's beginning to start, and it's this idea of people joining together to demand that there be justice around age issues and that there be equal opportunities and inclusion of people regardless of their age. And I think people are really starting to become very aware of the ageism and getting angry about it. And I think we hopefully will see in the near future a rising age liberation movement.

Unger: It's interesting because in a lot of the language that you use it's very similar to the language of equity. Is that an accident or not?

Dr. Levy: It's not. So I do think that equity and inclusion very much should include aging as one of the areas that we think about, one of the aspects of our identity that's really important to give equal opportunities and inclusion, so regardless of people's age.

Unger: So just in closing, what do you hope physicians take away from your research, either for themselves or as they treat aging patients?

Dr. Levy: Yeah, that's a great question. And I think doctors are in a great place to be change and thought leaders in this area. So in their own interactions with patients, I think it's great to ask them about their age beliefs, assess where they are. If they hear patients referring to their own aging in a negative way, to encourage them to think about their age beliefs and to become aware that it's possible to challenge some of the negative age beliefs. They're very common out there. They're not alone. And there are ways to reduce the negative age beliefs, challenge them and strengthen positive age beliefs. And so, I think physicians and health care providers can give those messages to their patients.

And then also, check in with them. So in future interactions with them, see how they're doing with challenging the negative age beliefs and strengthening the positive age beliefs. And I think these methods of questioning age beliefs are also just important for the physicians themselves or for everybody, myself included, to really be aware of the negative messaging, to challenge it and also then to think about ways to strengthen some of the positive age beliefs. So we have found that those well lead to improvements in the ways that we interact with older people and in our own lives.
Unger: Well, Dr. Levy, thank you so much for talking about all your research and your perspective. And I'll look forward to digging more into your book. It's called “Breaking the Age Code, How Your Age Beliefs Determine How Long and How Well You Live.” Thanks again for being here. And that's it for today's Moving Medicine video and podcast. You can check out all of our videos and podcasts at ama-assn.org/podcasts. Thanks again for being here today and take care.

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