Interview with Dr. James F. Fries
Compression of Morbidity

KYLE JENSEN: Welcome to SAGE Crossroads, the premier online forum in issues of human aging. These podcasts feature lively discussion with the experts on the ethical, political, economic, scientific, and societal implications of aging related science. Thank you for listening.

I'm joined now with Dr. James Fries. Dr. Fries is a research professor at the Stanford University School of Medicine.

Dr. Fries, what is the compression of morbidity theory as you originally proposed it?

JAMES FRIES: Well compression of morbidity means that a national policy and scientific goal is to delay the onset of chronic illness, that kind of illness that causes most of the misery in life, to as late in life as possible. Squeezing that misery in between its onset, which is ever later, and the age of death when of course it mercifully ends.

KYLE JENSEN: Now, what were the methods that you proposed for doing this?

JAMES FRIES: Well there are several methods when approaching the research question. When the compression of morbidity was advanced as a hypothesis in 1980, there was essentially no data available on the levels of disability with age in the United States or any place else, so there were essentially no data. Since that time, there has become a lot of data. There have been randomized trials in senior populations that have shown it is possible to increase senior health and decrease the disability in all of the decades. There have been two major and a dozen minor longitudinal studies that have been done nationally. The National Long Term Care survey has been the most cited. The National Health Survey is the second. These have now tracked disability levels in the United States since 1982 through the present, and there is a decline in disability levels over that period of about 2 percent. At about the same time, there has been a decline in mortality levels of about 1 percent each year. So 1 percent each year for mortality, morbidity 2 percent, which documents the compression of morbidity. Mortality rates are going down more slowly than our disability rates, and then finally there are the longitudinal studies of aging. We just published data through 21 years of a study of exercising versus non-exercising. The results are dramatic. The exercising group developed disability 16 years later than the controlled population after all appropriate adjustments had been made to the data, and the mortality rates were all down by half in the exercising group. The three major ways in which one has data are the longitudinal studies of data, the randomized control trials, and the national surveys. All of those are strongly positive, they are growing in solid literatures, and there is no counter evidence; there is no controversy in regards to these points, so it's generally agreed that the compression of morbidity is not only possible, but it has been happening in the United States for over two decades.

KYLE JENSEN: Now there are several out there that have actually said that it's pretty difficult to compress morbidity, and the research has shown an increase in lifespan as well, what do you say to those critics?

JAMES FRIES: Well, those are not critics unless you are going way back to the ancient times. The compression of morbidity is and always has been a dynamic hypothesis. That is it doesn't expect that longevity won't continue to increase. Longevity will continue to increase under hopeful scenarios for the human future, and morbidity will continue to decrease. The question is the relative rate of those, and I'm just telling you and anybody else who would make such an argument that in fact the data is in. The mortality rates are going down 1 percent a year. That's a substantial decline in mortality rates. That's been continuing for a century, that's almost a straight line, at 1 percent a year. The morbidity rates are going down 2 percent a year. It's the story.

KYLE JENSEN: What are the implications of shortened time of morbidity in related fields such as economics?

JAMES FRIES: Well, they are all positive implications. That is we're clearly much better if we move toward an area in which there are smaller numbers of people who need to be cared for my working class citizens whether their children or seniors or disabled folk, so obviously no matter how you crunch the numbers there are some pension effects from the longevity which are not positive in all economic scenarios, but there is no economic scenario in which a reduction in morbidity is not a positive event.

KYLE JENSEN: Lastly, the audience of SAGE Crossroads is made up of scientists, policy makers, and curious consumers. If there is one last statement that you could make to them about the compression of morbidity, what would it be?

JAMES FRIES: The compression of morbidity is a social good, and it's a social goal. We have a great majority of the way toward compressing morbidity which we haven't done yet. For example, the obesity epidemic is working against us. The continued cigarette smoking to the extent that it's a problem is working against us. We still have people that are exercising as sub optimal levels and sub optimal numbers of people are exercising. You could go on from there. The attractive part of compression of morbidity is that one can address major lifestyle initiatives towards its accomplishment as well as the science of trying to improve medical care and medical care outcomes.

KYLE JENSEN: On behalf of SAGE Crossroads, I'm Kyle Jensen.