

The Myth of Life Expectancy

“Well, yeah, but most people only lived to the age of 40 back then, so...”

This is a common retort I see in response to comparisons between our modern age and the past. It's intended as a mic drop that supposedly illustrates our superiority to our less scientifically-minded ancestors, who were apparently too wrapped up in superstitious religiosity and back-breaking labor to figure out how to survive a nasty paper cut.

But is it really true? Before the advent of modern medicine, were most people really dropping dead sometime in their early middle ages?

Not quite.

Currently, the [average life expectancy](#) for males in the U.S. is 76.3 years, and for females it's 81.2 years. [By 2030](#) these numbers are projected to rise to 79.5 and 83.3 respectively.

But, again, these are *life expectancy* numbers, which are calculated based on how long someone is likely to live *at birth*. It does not give an accurate picture of what age the average adult in a society is likely to reach. That number has actually remained fairly steady throughout history.

It's important to note that a major—if not *the* major—contributing factor to high versus low life expectancy is infant mortality. And here we should give credit where credit is due to modern developments. Infancy is a fragile time in a human's life, in which a myriad of afflictions and environmental factors can be life-threatening. But in the nineteenth and twentieth centuries, advances such as vaccines, antibiotics, improved hygiene, increased access to clean drinking water, improved disease treatments, and capitalism, among other things, are credited with dramatically improving

the infant and childhood mortality rate in developed and developing countries.

The following chart from the National Institute on Aging shows the impact that these advances had on life expectancy on women since 1840:



So props to the modern era for lowering the infant mortality rate and raising life expectancy. But these higher life expectancy figures do not mean it was uncommon for people in the pre-modern era to live to old age. In the Hebrew Scriptures it says in Psalm 90 that the average adult life “may come to seventy years, or eighty, if our strength endures.” This maxim was probably as true almost three thousand years ago, when it was written, as it is today.

[In his book-length study of the history of human mortality](#), mathematician H.O. Lancaster found that a 13th century member of the English aristocracy who lived to 21 could expect to survive as long as his counterpart in at the beginning of the 18th century, namely, to the age of 64.

As is commonly known, life in colonial America was difficult, and the average life expectancy was somewhere between 40 and 50 years. But [according to historian James Volo](#), it would be a mistake to conclude from these numbers that colonials were dropping like flies before their hair grayed:

“While the average life span of colonials may have been in the 40-to-50-year range, this statistic was largely due to the inclusion of a great number of infant and early childhood deaths, which dragged the average life expectancy down. Most of those that survived the ravages of disease and childhood accidents proved to be healthy, strong, and agile adults... A man of 21 might expect to live until 69; one reaching 50 might expect to live until 74; and one surviving until 70 could expect an additional decade of life.”

And [a paper published with the Journal of the Royal Society of Medicine](#) provides an important qualification to the life expectancy in Victorian England, which was “45 years for the upper class and 27 years for tradesman” in London in 1840:

“Once the dangerous childhood years were passed, however, Victorian contemporary sources (including regional variables) reveal that life expectancy in the mid-Victorian period was not markedly different from what it is today. Once infant mortality is stripped out, life expectancy at age five was 75 for men and 73 for women.”

I’m fine if people wish to assert that we today are superior to those generations of the distant past. My only request is that their assertion not be reached based on myths and caricatures, such as this one about life expectancy.