Is There a Limit to the Compression of Mortality?

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Abstract

With the fall of mortality, the frequency distribution of ages at death has been shifting to the right, but it has not retained the same shape over time. The distribution of ages at death has become more compressed around the mode, which is consistent with the prediction of mortality compression proposed by James Fries in 1980. In this paper we investigate trends in the age distribution of deaths at old ages using historical data from European countries (i.e., England and Wales, France, Italy, Sweden and Switzerland), the United States of America and Japan. The results, especially for recent decades in Japan, prompt us to reconsider the validity of the mortality compression scenario. This paper discusses the notion of limit for the compression of mortality and examines alternative hypotheses such as the shifting mortality model.