

## Special Edition



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169<sup>th</sup> Cutter Lecture on Preventive Medicine

Social Justice, Health Equity, and the Social

Determinants of Health

Friday, May 10, 2019



# **Special Edition**

# 169<sup>th</sup> Cutter Lecture Professor Sir Michael Marmot

#### Cutter Lecture on Preventive Medicine

Since 1912, the Cutter Lecture on Preventive Medicine has been one of the most respected presentations, especially in the field of epidemiology. The lectures are administered by the Department of Epidemiology at the Harvard T.H. Chan School of Public Health according to the bequest from John Clarence Cutter, MD (1851-1909), a graduate of the Harvard Medical School. He specified that the lectures be delivered in Boston, free of charge to medical professionals and the press. Covering a range of public health topics, the lectures remain dedicated to enhancing the physical and social welfare of the world's population.



Michael Marmot

Sir Michael Marmot is Professor of Epidemiology at University College London. He is the author of *The Health Gap: the Challenge of an Unequal World* (Bloomsbury: 2015) and *Status Syndrome: How Your Place on the Social Gradient Directly Affects Your H ealth* (Bloomsbury: 2004).

Professor Marmot held the Harvard Lown Professorship for 2014-2017 and is the recipient of the Prince Mahidol Award for Public Health 2015. He has been awarded honorary doctorates from 18 universities. Marmot has led research groups on health inequalities for over 40 years. He chairs the Commission on Equity and Health Inequalities in the Americas, set up in 2015 by the World Health Organizations' Pan-American Health Organization (PAHO/WHO). He was Chair of the Commission on Social Determinants of Health (CSDH), which was set up by the World Health Organization in 2005, and produced the report entitled: 'Closing the Gap in a Generation' in August 2008. At the request of the British Government, he conducted the Strategic Review of Health Inequalities in England post 2010, which published its report 'Fair Society, Healthy Lives' in February 2010. This was followed by the European Review of Social Determinants of Health and the Health Divide, for WHO Euro in 2014. He chaired the Breast Screening Review for the NHS National Cancer Action Team and was a member of The Lancet-University of Oslo Commission on Global Governance for Health.

He set up and led a number of longitudinal cohort studies on the social gradient in health in the UCL Department of Epidemiology & Public Health (where he was head of department for 25 years): the Whitehall II Studies of British Civil Servants, investigating explanations for the striking inverse social gradient in morbidity and mortality; the English Longitudinal Study of Ageing (ELSA), and several international research efforts on the social determinants of health.

He served as President of the British Medical Association (BMA) in 2010-2011, as President of the World Medical Association in 2015. He is President of the British Lung Foundation. He is an Honorary Fellow of the American College of Epidemiology; a Fellow of the Academy of Medical Sciences; an Honorary Fellow of the British Academy, and an Honorary Fellow of the Faculty of Public Health of the Royal College of Physicians. He was a member of the Royal Commission on Environmental Pollution for six years and in 2000 he was knighted by Her Majesty The Queen, for services to epidemiology and the understanding of health inequalities. Professor Marmot is a Member of the National Academy of Medicine.

### Social Justice, Health Equity, and the Social Determinants of Health

Sir Michael Marmot, Director of the Institute of Health Equity and Professor of Epidemiology at University College in London, delivered the 169th Cutter Lecture on May 10, 2019, at the Harvard T. H. Chan School of Public Health.

After being introduced by Ichiro Kawachi, Professor of Social Epidemiology at Harvard Chan, as "the most famous social epidemiologist in the world," Marmot was welcomed with rousing applause and immediately had the full attention of his audience. He set the stage for his talk by stating the fundamental question posed in his 2015 book *The Health Gap, The Challenge of an Unequal World:* "Why treat people and send them back to the conditions that made them sick?"

### **Life Expectancy Takes an Unexpected Turn**

Launching into a sobering multidimensional overview of a range of societal conditions impacting health, Marmot began by sharing some troubling trends in life expectancy statistics. From 1921 forward, life expectancy in his native England steadily improved by approximately one year every four years... until 2011, at which point the rise abruptly stalled, according to the UK Office of National Statistics (ONS) and first reported in a 2017 Institute of Health Equity study.

Labeling this a "health crisis" in the press, Marmot professed that the health of a nation's population is a fundamental indicator of how well that society is meeting the needs of its citizens. The conservative coalition government that rose to power in the UK in 2010 defensively dismissed Marmot's claims, suggesting other causes for the flatlining of life expectancy, including the flu, obesity, or, perhaps, the weather. Regardless of cause, there is no disputing the urgency, then and now, says Marmot, to address what is a critical health issue. Not only is there no longer any uptick in life expectancy in the Commonwealth, but a few months ago, the ONS reported declining life expectancy at birth in Northern Ireland, Scotland, and Wales.

### This is a calamity! We expect health to get better all the time; that's what we were brought up to believe.

### **Social Inequality Gaps Continue to Expand**

In addition to concerning drops in life expectancy, disparities between social classes are on the rise. The poorest women in England, for example, are now expected to die at an earlier age while the richest British women are living longer. This is happening in England. We would not expect to see similar trends in life expectancy in the US, right? Wrong. Life expectancy for both men and women in the US declined three years in a row (2015-2017), with unintentional injuries, including accidental drug overdose (70,000 in 2017), tagged as the leading (and preventable) cause of death.

Life expectancy at age 50 for the poorest men in the US has remarkably remained virtually unchanged for cohorts born between 1920 and 1950. By contrast, the higher the income the greater the rise in life expectancy for 50-year-old men born between 1920 and 1950, resulting in a steepening social gradient. The grim outlook is even worse for America's impoverished women. For the poorest 30 percent of the population, life expectancy at 50 has dipped from 78 years for women born in 1920 to 75 years for those born in 1950. Over the same period, the wealthiest US women have increased their life expectancy from 84 to 88 years.



















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### How can you improve life expectancy for the overall population when you have this dramatic increase in inequalities?

If your father is very poor here in the "land of opportunity," you are very likely to be poor too. Social mobility is virtually nonexistent. Only about 7 percent of the country's top earners come from fathers on the other end of the income spectrum. Also, while more than 90 percent of children earned more than their parents in 1940—fulfilling "the American Dream"—that number has steadily declined, dipping to 50 percent in 1984, a phenomenon Marmot strongly believes is linked to declining life expectancy in the US.

### A Global View of Life Expectancy

Broadening the perspective for the purpose of comparison, Marmot next shared life expectancy data from large, small, rich, and poor nations across the world. Hong Kong boasts the world's longest life expectancy at approximately 84 years, on average, according to 2015 data. While this may or may not be surprising, the fact that life expectancy in the US (about 78 years), while significantly better than in Russia (71), is lower than in Cuba (79) grabbed the attention of lecture attendees. Also of note is the fact that the US, the richest nation in the world in terms of GDP per capita, falls short of significantly less wealthy Costa Rica and Chile in terms of life expectancy at birth. Canada, roughly 20 percent less wealthy than the US, boasts a life expectancy of about 82 years. The numbers prove that once a country reaches a certain income threshold, getting richer is not the secret to getting healthier.

### Why is the US Performing So Poorly?

Marmot highlighted several additional comparisons as key performance indicators. For starters, there are four times as many homicides in the US versus Hong Kong, and the incarceration rate of 700 per 100,000 is nearly sevenfold that of the Chinese territory inhabited by 7 million people. Additionally, despite the fact that the US spends the most money on healthcare, the country ranks 23rd in the world in social spending as a percentage of GDP, likely a strong indicator of why America ranks 27th in life expectancy at birth.

The poorest men in Baltimore, home to some of the nation's most destitute urban neighborhoods, have a life expectancy of 63. In Costa Rica, those earning similar incomes live to an average age of 77. It is not just a lack of money that impacts health; the social, political, cultural, economic, and environmental conditions surrounding poverty are largely to blame. For example, one-third of 17-year-olds in Baltimore's poorest inner-city neighborhood already have a criminal record, and violence is rampant. Costa Rica boasts nearly 100 percent renewable energy consumption, to cite one potentially positive influence.

The US ranks at the bottom among 40 of the world's richest countries analyzed by UNICEF in terms of homicide rates (0-19 years of age) and bullying in the 11 to 15-year-old age group. US performance on measures of neonatal mortality, suicide, and mental health fall similarly near the bottom of the chart, radically worse than top performers like Portugal, Iceland, Spain, and Germany. Nearly 30 percent of all children in the US live in households earning less than 60 percent of median income. Looking at the wealth gap in terms of race, the median net worth for white families in the US in 2016 was \$171,000 versus \$18,000 for black families, according to Federal Reserve figures.

Childhood poverty is a political decision. Evidence shows it can be reduced by manipulating tax and benefit systems.

Half of the wealth in tax shelters belongs to the top 0.01 percent of people in the world's advanced economies. That money is equivalent to 5 percent of global GDP, not to mention all the financial resources lost at the hands of multinational corporations evading taxes. Global organizations shift €600 billion a year into tax havens, according to a 2017 study cited by Marmot.

### **Drivers for Health Equity and Dignified Lives**

As is the case in expanding our understanding of many of life's greatest challenges, it helps to go back to the beginning. Adverse childhood experiences (ACEs), including physical abuse, mental illness, and parental separation, all follow the social gradient trend. The lower the family income, the greater the likelihood of more ACEs and associated negative long-term lifetime impacts like drug/alcohol addiction, violence, and incarceration. If we could reduce economic inequality, says Marmot, we could reduce the frequency of adverse childhood experiences and all the enduring ramifications. If we invest more in early childhood development, we can reduce ACEs, prevent mental illness in children—half of all psychiatric disorders (excluding dementia) present by age 14—and dramatically lower the prison population.

We, the doctors and scientists in this room, have earned the trust of the population and must make our voices heard. We stand for truth; we stand for social justice. I'm certain that everybody here has an important role to play in terms of our commitment to social justice, which drives improvements in global health. People like us need to make it happen.

### Social Injustice Is Killing on a Grand Scale

People generally are not poor due to irresponsibility or laziness... in fact, most disadvantaged people are employed. The problem is they are not paid enough money to live a decent life, says Marmot. They don't earn adequate wages to consume a healthy diet, for example, regardless of all the advice to do so. Consuming lots of fruits and vegetables would "eat up" an unmanageable portion of their disposable income. How would they pay the rent and heat their homes? Society must do a better job of enabling wellbeing by arming people with what they need to live lives of purpose, balance, and meaning.

Marmot concluded the 169th Cutter Lecture by reemphasizing the urgent need for evidenced-based policy presented in the spirit of social justice to improve the state of world health... ideals perhaps echoing what Martin Luther King referred to as "unarmed truth" and "unconditional love," respectively:

I believe that unarmed truth and unconditional love will have the final word in reality. This is why right, temporarily defeated, is stronger than evil triumphant.

- Martin Luther King (1964)

























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