



e-quilibrium

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Social Factors

Numerous studies have reported a link between lower socioeconomic status and poorer health, including higher mortality rates. There appear to be a variety of contributors to this relationship. Individuals with less education and less money tend to have more negative health behaviors, such as smoking. Persons in poorer communities are more apt to have inferior housing conditions, less access to health care, and substandard nutrition. Furthermore, stressors may include unemployment or unfavorable working conditions, exposure to violence, unsafe environments, and discrimination.

The impact of such conditions is profound. An analysis of 47 studies, summarized in an article published in a 2011 issue of the American Journal of Public Health, reported that in the year 2000, the following numbers of deaths in the United States could be linked statistically to several social factors: 245,000 to low education, 176,000 to racial segregation, 162,000 to low social support, and 133,000 to individual level poverty. What this means from a statistical standpoint is that these deaths would likely not have occurred if the individuals had better socioeconomic circumstances. For comparison, in 2000, deaths actually attributed to heart attacks were 193,000 and deaths from strokes were 168,000.

While such data are sobering, even more concerning is that childhood exposure to socioeconomic disadvantage is associated with increased health risks for the entire lifespan, even when such children grow up and attain better economic status in adulthood. Parents in poorer and more stressful conditions may be unable to provide the kind of nurturing

environment conducive to healthy development. Of note, there is now evidence from functional MRI studies that early life exposure to such disadvantage becomes biologically embedded.

Children of parents of lower socioeconomic status (marked by measures of education, occupation, and income) have been found to have delayed development of the prefrontal cortex in the brain, which affects attention, reading and language attainment, as well as other higher cognitive functions. Additionally, differences in functioning in brain regions (striatal areas) associated with reward-related information have been found between disadvantaged and advantaged children. Furthermore, adults whose parents were disadvantaged during child-raising years have been found to have reduced activity in brain regions related to impulse-control, and exaggerated amygdala responses to threatening stimuli. Increased amygdala responsivity has been associated with heightened cardiovascular reactions to stress and increased atherosclerosis. It is thought that stress hormones are an important mechanism by which disadvantaged social conditions affect brain development.

Just as children don't choose their genes, they don't choose the socioeconomic circumstances of their parents, but it is increasingly evident that both affect lifelong health risks. How to improve socioeconomic conditions for young parents and/or how to decrease risks for children who are raised in disadvantaged circumstances are obviously daunting challenges. On a large scale, these are matters for consideration in political and economic discourse. Certainly there is controversy over the effectiveness of social and economic "safety nets," and whether or not such programs indeed decrease the stress associated with disadvantaged conditions, or lead to better circumstances. On a more personal level, options for action include:

- participation in national, state, and or local debate regarding socioeconomic issues
- personal philanthropy
- direct involvement with and/or service to disadvantaged individuals

Involvement in such matters has potential to be good for one's own health, as engagement in meaningful activities is known to be a contributor to life satisfaction. And, persons who

find life meaningful and have a high degree of life satisfaction
tend to also have better health.

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