Social status effects stress and health in humans



In his study of stress relating to social status, findings reported in his article Social Status and Health in Humans and Other Animals, Robert Sapolsky proves there is a direct link to stress levels and social status. However, Sapolsky also reveals how this relationship is unsteady and affected by too many other variables to be an isolated cause of poor health in humans. Sapolsky explains the physiological reactions to stress. Furthermore, psychological causes of stress reactions are discussed. He then builds the map of stress levels in a hierarchy or social rank and correlates the two. Using examples from other scientists' experiments, Sapolsky reviews the outcome of stress-related illnesses and poor health to low reproduction, diseases, and early death in humans.

In understanding how stress can relate to unhealthy characteristics, we need to understand how stress effects the body physiologically. Sapolsky explains that the stress-response in human bodies can be damaging to the body itself. Stress-response includes such bodily reactions as higher levels of LDL "bad" cholesterol, lower levels of HDL "good" cholesterol, elevated blood pressure and heart rate, also "immune defenses are enhanced, pain perception is blunted, cognition is enhanced, and sensory thresholds are sharpened "(Sapolsky, 204, p. 394).

These reactions are helpful to the body but only at moderate levels and under certain circumstances. Prolonged levels can logically cause weaknesses in some body parts such as the heart, and thus lead to illness, disease and early mortality rates (Sapolsky, 2004, p. 400). It stands to reason that lower ranking social status can cause more physical stress.

When lower in the socioeconomic hierarchy, there is less opportunity for the basic physical needs. Such needs are adequate shelter, food, and clothing. An individual with less options or opportunity is going to be physically stressed more often and at a higher level than an individual with more options for outlets for everyday physical necessities. For example, an individual with a warm, hygienic and comfortable home would be less stressed compared to a homeless individual with something as crude as a cardboard box for shelter or no shelter at all. Sapolsky takes this logical reasoning one step further by involving the availability of health care to lower social status.

"The fact that poverty limits access to health care. ... where poorer people have fewer preventative checkups, longer waits for medical procedures, less access to new experimental procedures, and so on." (Sapolsky, 2004, p. 409). However, in doing so, Sapolsky also points out that it is not only stress that effects poor health in lower social- ranking individuals, but also the availability of health care.

Citing a few experiments from other scientists, Sapolsky also makes the statement about how most physical results were explained not only by stress but "arose from genetic and developmental influences" (Sapolsky, 2004, p. 408). In this he is concluding that the physical reactions to stress causing poor health are also results of other variables. Stress is not always a reaction to a physical threat.

Psychological stress is also a factor. Psychological stress is the "anticipation of a homeostatic perturbation" (Sapolsky, 2004, p. 396). If a threat is expected or imagined, then the body goes into stress-response mode.

However, if the stress is imagined and never occurs, then this can be not only necessary, but occurring so often that it affects the body tremendously. Thus causing stress-related diseases and poor health. (Sapolsky, 2004, p. 396). It stands to reason that lower ranking individuals would be anticipating stress more often: worrying about where to live, what to eat, paying for health care, or caring for their children. However, this is not always the case, as it is well-known that higher social ranking individuals have stresses too.

They are simply different stresses. Yet, Sapolsky points out that with a higher social ranking, these individuals have greater resources for stress relief: more control over stressors, more outlets for frustration, and more social support (Sapolsky, 2004, p. 396-397). Thus, the stress-response would be less extensive in higher social ranking individuals (Sapolsky, 2004, p.

408). In a final attempt to study socioeconomic status and the relationship to stress and human health, Sapolsky focuses on the fact that individuals are also affected by psychosocial factors. In other words, perceptions of being poor can affect stress levels and thus health in an individual. All measurements of rich and poor in a society are inconsistent between societies as a direct result of individual expectations of self or expectations placed upon individuals by society. Failure to meet these expectations create psychological stress which in turn leads to an increase in stress-responses and later poor individual health (Sapolsky, 2004, p.

410-411). Furthermore, Sapolsky points out that poverty alone is not as indicative of poor health within a social status as "poverty amid plenty" (Sapolsky, 2004, p. 411). Where there is high income inequality, impoverished communities tend to "decrease their investment in (and expectations of) the community, thereby reducing everyone's quality of life. This decline results in more psychological stressors…and less social support" (Sapolsky, 2004, p.

411). In conclusion, Sapolsky does a splendid job of linking stress levels to social status and extrapolating how it leads to poor health in humans.

Nonetheless, it is also apparent that stress is not the sole factor resulting in poor health in lower social ranks. Due to other factors such as availability of health care, genetics and developmental influences, it is difficult to pinpoint the exact measurement of stress-response effects on poor health in humans according to social hierarchy. Still, stress is definitely a great cause to poor health in humans of all statuses and definitely more abundantly a cause in the lower social ranks.