# Virtual Mentor

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## Journal discussion

**Socioeconomic determinants of health: the facts are in** by Vanessa Yasmin Calderon

Cohen A, Houck PR, Szanto K, Dew MA, Gilman SE, Reynolds CJ 3rd. Social inequalities in response to antidepressant treatment in older adults. *Arch Gen Psychiatry*. 2006;63:50-56.

Miech RA, Kumanyika SK, Stettler N, Link BG, Phelan JC, Chang VW. Trends in the association of poverty with overweight among US adolescents, 1971-2004. *JAMA*. 2006;295:2385-2393.

Shishehbor MH, Litaker D, Pothier CE, Lauer MS. Association of socioeconomic status with functional capacity, heart rate recovery, and all-cause mortality. *JAMA*. 2006;295:784-792.

It has been observed time and again that those with low socioeconomic status suffer poorer health outcomes than individuals with higher socioeconomic status (SES). If there was doubt about the truth of the anecdotal evidence, that doubt has recently been dispelled. With an increase in diversity in the scientific community and the louder voice of communities that suffer social inequalities, more attention is being paid to the health care injustices experienced by lower income individuals. Mainstream media have also recognized the importance of this issue. In an interview between its physician correspondent, Dr. Sanjay Gupta, and former President Bill Clinton, CNN highlighted the relationship between poverty and poor health in September of this year. And in 2006 alone, the *Archives of General Psychiatry* and the *Journal of the American Medical Association* have published research articles linking poorer health outcomes with low SES [1-3].

These articles examine the environmental and cultural factors that often act as causal agents or contributors to the disparity in question. In "Trends in the Association of Poverty with Overweight Among US Adolescents, 1971-2004," Richard Miech and his colleagues report that between 1994-2000, 50 percent more 15- to 17-year-olds living in poor families suffered from obesity than did adolescents in non-poor families. This was true for male, female, non-Hispanic white and non-Hispanic black adolescents [4].

The authors noted physical inactivity as one possible explanation for their finding. Why do adolescents in poor families exercise less than those in non-poor families?

The authors postulate that economically disadvantaged neighborhoods often have higher crime rates, leaving adolescents who live there without a safe space for physical activity. These areas also tend to lack local community recreational centers or a sufficient number of parks. In their comment section, Miech et al. also suggested the lack of nutritious, low-calorie food as another possible cause for the obesity epidemic that disproportionately affects adolescents in low SES households [5]. Poorer neighborhoods tend to have grocery stores with inadequate food choices and are plagued with a higher density of fast food restaurants than non-poor neighborhoods.

In "Association of Socioeconomic Status with Functional Capacity, Heart Rate Recovery, and All-Cause Mortality," Mehdi Shishehbor and his co-authors also recognized that individuals with lower SES lacked adequate nutritious food choices and safe options for outdoor exercise [6]. This group of authors further noted that the individuals in their study had a higher exposure to tobacco vendors and were more likely to suffer from psychosocial stress and depression as a direct result of their environment [7]. Shishehbor's study linked these variables to increases in impaired functional capacity, abnormal heart rate recovery time and, most astounding of all, all causes of mortality. Thus, according to this study individuals have a higher likelihood of dying at any given time simply by being economically disadvantaged [8].

Physical health is not the only measure negatively effected by low SES; in "Social Inequalities in Response to Antidepressant Treatment in Older Adults," Alex Cohen and his co-authors showed the association between poorer mental health outcomes and low SES. The study demonstrated that response to treatment and suicidal ideation were inversely proportional to SES. Subjects residing in low income tracts were less likely to respond to treatment and were two-and-a-half times more likely to report suicidal ideation during treatment when compared to subjects in middle and high income tracts, respectively [9]. It is important to note that individuals with low SES had both an increased risk of experiencing a first depressive episode and greater severity in the course of depression (as measured by episode duration and recurrence) [10]. In addition, being economically disadvantaged put study subjects at higher risk for psychosocial stress which can contribute to depression [11].

The strong association between membership in racial and ethnic minority groups and low SES is well established. Recognizing this, all three articles advocate for further research into the connection between race and ethnicity and health disparities. Unfortunately, due to many barriers including a deep mistrust of American medicine, the number of minorities who participate in research studies continues to be minute, which hinders the collection of this data [12]. The scientific and medical communities must continue to work to gain the trust of ethnic minority groups. Providing culturally sensitive outreach staff and resources has been shown to successfully address the loss of trust for the medical profession among ethnic minority groups [13].

## **Moving forward**

Studies of low SES provide important information for developing the needed policy to reduce or prevent health disparities between those at different socioeconomic levels. Efforts to prevent obesity in adolescents must look beyond education about the food pyramid and examine the need for an environment that offers safer options for outdoor exercise and abundant sources of nutritious food. Including an identifier for low SES in a risk assessment for functional capacity and heart rate recovery would have positive public health implications and would allow researchers to identify and treat those at greater risk for poor health outcomes. Improving psychosocial environments and social support networks would help to eliminate the widening mental health disparity across the SES spectrum. With this concrete and factual data, it should be less difficult to convince policy makers that grave health injustices exist. Thus, the importance of this research is clear. However, it is imperative to realize that, as long as poverty and the division of social classes exist, the struggle to eliminate health disparities and achieve health equity will be a challenging one.

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