SUBJECTIVE AND OBJECTIVE MEASURES OF SOCIOECONOMIC STATUS: PREDICTORS OF CARDIOVASCULAR RISK IN COLLEGE STUDENTS IN MUMBAI, INDIA

The relationship between socioeconomic status (SES) and health changes as a society develops. In developed countries, high SES is associated with better health, but in developing countries, high SES is associated with poorer health. However, measuring SES is difficult in countries like India, where the traditional class and caste system are interwoven and complex. The current study explored the relationship between subjective and objective indices of SES and between SES and the metabolic syndrome among Asian Indians residing in Mumbai, India. Participants were a subset of young adults (N=112, median age 19 years, 24% male) who were part of larger study assessing psychosocial correlates of the metabolic syndrome. SES was assessed through objective (father’s education) and subjective (SES ladder) indices. Data indicated that high subjective SES was correlated with fasting blood sugar ($r=\cdot28$, $P<.003$), and father’s education was correlated with high cholesterol ($r=.32$, $P<.005$). Subjective and objective indices of SES were also correlated with each other ($r=.24$, $P<.04$). These data reiterate that the link between SES and health is obvious from an early age, regardless of the measures used to assess SES. Given the complexity of assessing SES in developing countries, objective subjective indices should be used in assessing SES. (Ethn Dis. 2008;18[Suppl 2]:S2-235–S2-237)

Key Words: Socioeconomic Status (SES), India, Class, Caste, Metabolic Syndrome

INTRODUCTION

Socioeconomic status (SES) plays a causal role in the incidence and prevalence of diseases such as coronary heart disease, diabetes mellitus, essential hypertension, and stroke in the developed world, including the United States and the United Kingdom. The relationship between SES and the developmental status of a country is complex and dynamic; the relationship between SES and health is positive in developed countries and negative in developing countries. The metabolic syndrome, which consists of elevated blood pressure, abdominal obesity, dyslipidemia, and insulin resistance, is a preclinical marker and a risk factor for all of these lifestyle-related disorders.

The relationship between SES and health is particularly interesting in India, which is globalizing at an accelerated pace in urban and industrialized areas, while rural areas lag behind. This difference creates significant economic disparity between rural and urban areas. Also, within urban areas, where poverty and wealth have always coexisted, economic prosperity worsens the existing disparity. Globalization is superimposing a class system (based on economic considerations) on an existing caste system (based on family membership in hierarchical cultural groups). Thus, the relationship between SES and health is complex and not easily understood.

The prevalence of the metabolic syndrome, has been rising significantly since the early 1990s in India, particularly in urban areas. Urban life in India is characterized by low activity levels and high caloric intake, which may lead to elevated risk for hypertension, coronary heart disease, and diabetes. Rapid globalization and concomitant changes in social infrastructure are also a source of stress, particularly in urban areas. Stress may be a mediating pathway between SES and health. Given the complexity of SES variables within the Indian sociopolitical system, measurement of SES is key to understanding the SES-health relationship.

Preliminary data from India on SES and health indicate that high SES is correlated with an increased incidence of hypertension, coronary heart disease, and diabetes. Early indicators in recent data also show the transition to a SES-health pattern among urban Indians that is similar to that seen in the United States, in which high SES is associated with better health. When a comprehensive assessment of complex indicators of SES was used, the rates of diabetes mellitus were almost twice as high in high-SES groups in urban settings (25.5%) compared to low-SES groups (12.6%). Hence, data indicate that the appropriate assessment of SES is a key element in establishing the SES-health relationship.

This relationship must be measured among younger people, since the link between SES and health is apparent from a very young age, and prevention efforts among younger people may help prevent health disparities in the future. The aims of the current study were to assess the link between subjective and objective indices of SES and between SES and the metabolic syndrome.

METHODS

Participants were undergraduates (N=112, median age 19 years, SD 1.23 years, 24% male) enrolled at a liberal arts college in Mumbai, India.