

Social and Environmental Determinants as well as Health Consequences of Sleep Disparities

Chandra L. Jackson, PhD, MS ^{1,2}

¹ Epidemiology Branch, National Institute of Environmental Health Sciences, National Institutes of Health, Department of Health and Human Services, Research Triangle Park, North Carolina

² Intramural Program, National Institute of Minority Health and Health Disparities, National Institutes of Health, Department of Health and Human Services, Bethesda, Maryland

Sleep, an essential human need for maintaining biological homeostasis, is a seemingly simple behavior and yet complex physiological state that is not entirely endogenous and is, therefore, positively or negatively affected by modifiable physical (e.g. light; temperature; noise) as well as social (e.g. psychosocial stress) environmental factors. Preventing or minimizing the impact of environmental disturbances on sleep duration, quality, and timing could help mitigate the potential detrimental health impacts of adverse environmental disturbances, which are differentially experienced by race/ethnicity and socioeconomic status. Some health outcomes (e.g. obesity, hypertension, diabetes) most notably associated with cardiovascular disease are also affected by suboptimal sleep, and recalcitrant racial/ethnic and socioeconomic disparities in the relationship between sleep and various cardiometabolic conditions exist. Using the socioecological framework coupled with the biopsychosocial model, this presentation will describe the burden of poor sleep and cardiometabolic health across racial/ethnic and socioeconomic groups in the United States. The presentation will also describe pathways by which features of the physical and social and environments may influence sleep health disparities and subsequent health outcomes across the life course.