THE INTERSECTIONS OF HEALTH AND WEALTH:
SOCIOECONOMIC STATUS, FRAILTY, AND MORTALITY IN INDUSTRIAL ENGLAND
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Abstract

Socioeconomic status (SES) is considered one of the most powerful predictors of mortality today (Saunders & Hoppa, 1993). However, studies of health in living populations and bioarchaeological studies of health in the past often oversimplify the connection between SES and mortality and overlook heterogeneity in frailty within a population and the potential for multiple types of marginalization to be layered within a single individual. This dissertation project uses skeletal samples to examine the interactions of SES, demographic characteristics (e.g., age and sex), exposure to physiological stressors, and mortality in the context of industrialization in 18th- and 19th-century England. Skeletal data from four industrial-era cemeteries (St. Bride's Fleet Street, Coach Lane, St. Peter's Wolverhampton, and New Bunhill Fields) were analyzed with paleodemographic approaches (hazard modeling, hierarchical log-linear analysis, and analysis of variance) to (1) determine how morbidity and mortality patterns in industrial England differed between SES groups; (2) investigate how physiological stressors throughout life interacted with socially meaningful categories such as age and sex to produce layered marginalizations that influenced frailty and mortality in industrial England; and (3) evaluate the potential of stressors underrepresented in bioarchaeology to enhance our understanding of marginalization, intersectionality, and mortality in the past. Generally, the results of the hierarchical log-linear analyses and the analyses of variance suggest that marginalized identities (i.e., low SES or female sex) were associated with earlier ages at death. Furthermore, several skeletal indicators of early life stress (cribra orbitalia, tooth size, and the anteroposterior diameter of the lumbar vertebral neural canal) were associated with low SES and earlier age at death, providing additional bioarchaeological support for the Developmental Origins of Health and Disease hypothesis. The results of the hazard analyses, the analyses of the transverse diameter of the lumbar vertebral neural canal, and the fluctuating asymmetry analyses underscore the importance of considering the issues associated with the Osteological Paradox (e.g., selective mortality) when interpreting patterns of frailty and mortality observed in skeletal samples. This project is the first to use paleodemographic approaches to investigate intersectionality in the past, and thus provides a novel model for exploring the effects of social identity in bioarchaeological studies.