TUBERCULOSIS IN THE AMERICAN MUSEUM OF NATURAL HISTORY MEDICAL SKELETAL COLLECTION: A COMPARISON OF AN OSTEORELOGICAL DATASET TO HISTORICAL RECORDS

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Abstract

Discrimination and marginalization of individuals based on factors such as socioeconomic status, “race,” and sex have the potential to influence health. This is evident in the epidemiology of tuberculosis, which disproportionately infects the poor and people identified as black. Tuberculosis also happens to be one of the few diseases that can leave its mark on bone, making it the perfect candidate for studies in the field of bioarchaeology.

In this study, 132 individuals from the American Museum of Natural History’s Medical Skeletal Collection were examined for signs of tuberculosis. The collection was acquired from New York City area medical schools between 1945 and 1950 and has individuals of known age, sex, and “race,” but not cause or year of death. I focused on lesions on the vertebrae, joints, ribs, and skull, and attempted to compare rates of tuberculosis in the collection to historical data from the New York City Area.

I hypothesized that the demographics of the collection would not match up to the actual population of New York City because osteological datasets do not represent the population as a whole, which was correct. I also expected that because skeletal collections often reflect individuals of low socioeconomic status that tuberculosis would be present, but wanted to know if it would reflect higher rates of the disease in individuals labeled as black. Discrepancies in rates of tuberculosis based on “race” did not play out in the collection as only two white males showed strong signs of the disease. However, this does reflect higher rates of tuberculosis in males versus females.