

ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #290

1. Title:

Correlates of MIP in African-Americans and Whites

2. Writing Group (Lead listed first):

(lead) Carpenter, Tockman, Boehlecke, Davis, Hutchinson and Heiss

3. Timeline:

Analysis can begin immediately. The target for completion of the manuscript is May 1995.

4. Rationale:

Relatively little has been published on correlates of Maximum Inspiratory Pressure (MIP), a measure of respiratory muscle strength. Although Enright and colleagues have examined selected correlates of MIP in a large number of older adults, descriptive studies in middle-aged adults are few and based on small numbers of subjects. There are virtually no reports of MIP correlates in middle-aged African-Americans. A thorough descriptive analysis of MIP in individuals aged 48-67 years will be a valuable contribution to field of pulmonary function.

5. Main Hypothesis:

Based on previous publications, negative associations with MIP are expected for age, female gender, current smoking, self-reported fair-to-poor health status, and waist girth.

In addition to the above-mentioned variables, the following factors will be evaluated as independent predictors of MIP: study center and race (previous studies involving small samples of blacks have found no ethnicity effect); additional indices of body size including body mass index, sitting height, calf girth and current weight relative to that at age 25; indicators for the ability and motivation to cooperate such as education and income levels, and physical activity index. Whereas positive associations are expected with indices of fitness, inverse associations are likely with indicators of obesity. Indicators of technician effects and data quality (technician code and number of days since MIP data collection began, MIP reproducibility codes, MIP acceptability codes) will be evaluated as possible covariates.

6. Data:

Variables indicated above (MIP is only available in Visit 2).