Manuscript #245

1. Title:
Self-Rep. Health and CHD
Full Title:
Self-reported health status and incident coronary disease and mortality

2. Writing Group (list individual with lead responsibility first):
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3. Timeline:
Immediately

4. Rationale:
Self-reported health status (SRHS) had been found to be one of the strongest predictors of morbidity and mortality, at least in some gender-age groups (Idler, 1990). Preliminary analyses in ARIC show important differences in self-perceived health status by gender and race. On the other hand, we also showed important differences in awareness of risk factors in the ARIC population (MS# 146). To our knowledge, how self-perceived health status interact with risk factors awareness and with access to medical care in their relation with disease has not been investigated.

Further preliminary cross-sectional analyses in ARIC showed inconsistent associations between SRHS and prevalent CHD and carotid IMT across race-gender strata. Now that incident data is available, it is important to address the question of whether a simple question on self-assessment of health predicts clinical coronary disease and how does this depend on the presence of baseline subclinical atherosclerosis (i.e., carotid IM thickening) and risk factors. As compared to previous studies, the ARIC is in a very unique position to address these questions as well as a unique ability to assess the impact of yearly update of SRHS information through the annual follow-up questionnaires.

5. Main Hypothesis:
1) SRHS at the ARIC baseline exam is associated with an increased risk of CHD incidence and mortality. This association is stronger in participants with thicker IMT at baseline.
2) Changes in SRHS through the annual follow-up surveys are associated with changes in the hazards of CHD incidence and mortality.

6. Data (variables, time window, source, inclusions/exclusions):
Analyses will be done both in the entire cohort and after excluding prevalent CHD cases at baseline
Main dependent variables: incident CHD, CHD mortality, total mortality, cancer mortality.
Independent variables: self-perceived health status (baseline, updated at AFU)
Covariates (baseline and updated): SES, availability of health insurance, hypertension, and hypercholesterolemia awareness, sex, age, race, smoking, alcohol, family history, physical exercise, carotid IMT.
Univariate analyses using Kaplan-Meier plots will be conducted. Cox proportional regression analyses both using baseline and time-dependent explanatory variables and covariates will be explored.