ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #429

1. a. Full title: Explaining the association between race and hypertension incidence
   b. Abbreviated title: Explain race/hypertension

2. Writing Group:
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3. Timeline: Immediately

4. Rationale:

   Whereas it is well established that blacks have higher prevalence and incidence of
   hypertension, it is not entirely clear how much of this can be explained by SES.
   Moreover, even after controlling for the standard SES surrogates (e.g., education, etc.) a
   residual effect can still be present due to unmeasured residual differences in social and
   cultural factors (Muntaner et al, AJE 1996;144:531)

5. Main Hypothesis:

   Blacks have higher incidence of hypertension than whites.

   This difference is partially explained by:
   - SES indicators (education, income, occupation)
   - Indicators of psychosocial distress (anger, hostility, social support)
   - Other risk factors for hypertension (e.g. overweight and diet).

6. Data (variables, time window, source, inclusions/exclusions):

   Participants with hypertension (BP>=140/90 or medications) at baseline will be excluded.
Incidence of hypertension will be determined according to the blood pressure measurements and/or medications at visits 2 and 3.

Covariates of interest (in addition to race) will be education and income level (at baseline), occupation (baseline and updated), scales of social support, hostility/anger, and depression (visit 2), body mass index (baseline and updated), dietary data (sodium intake at baseline), and other potential correlates (smoking, insulin, physical exercise).

The main analytical strategy will be as follows:

1) Examine the crude association between race and incident hypertension.

2) Examine the crude association between SES and psychosocial covariates and incident hypertension. Examine these associations stratifying by race.

3) Repeat the race-htn analysis (#1) after stratifying by SES and levels of psychosocial characteristics. Further stratification by BMT and nutritional indicators will be attempted.