1.a. Full Title: MARITAL STATUS AND MORTALITY IN THE ATHEROSCLEROSIS RISK IN COMMUNITIES STUDY

b. Abbreviated Title (Length 26 characters): MARITAL STATUS & MORTALITY

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

   **Lead:** Madhu Singh

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3. Timeline:

   - Complete analysis: Jan, 2003
   - Submit first draft to publications committee: Aug, 2003
   - Submit to Journal: Dec, 2003

4. Rationale:

   The National Institute of Health estimates that there are 12,600,000 individuals with CHD in the US. In 2000, heart disease was the leading cause of death for both black and white males and females with AMI and other CHD accounting for 75 percent for all heart disease deaths (1)

   Marital stressors have been defined as “circumstances or conditions of daily marital life that are generally considered problematic or undesirable” (Ilfeld, et. al., 1980) (5), these are of an ongoing nature whereas the outward manifestation is of divorce/separation. A number of observational, population based and longitudinal studies in Sweden, Netherlands, Finland, UK and the US (1,9-21), and others have investigated the effect of marital status (7-11,13,15,21,22), divorce (11,16,23) widowhood (12) and of being single (2,6,8,17,24) on mortality in general and on CHD and CVD, specifically. It is a consistent observation that the married enjoy better health than those of other marital statuses. The separated and divorced are at a higher risk, but the direction of the causal sequence is not yet clear. The social selection hypothesis suggests that marital status is a consequence of health, whereas the social
causation hypothesis identifies separation/divorce as a precipitant of poor health. These hypotheses are not necessarily mutually exclusive. There are also evidences of gender-linked differences with women having more resilience and being less reactive to these stressors. (7,15,20,23,25). In the late 1960’s an onset of decline in CHD mortality in the US was observed, however the death rate remains higher in blacks than in whites (26,27). Some research has been done on ethnic differences, psychosocial factors and CHD (14,28,29).

The ARIC Study has not so far explored the direction and relationship of marital status with CHD and all cause mortality. This large data base on a bi-racial group from a variety of socio-economic, occupational and educational backgrounds in 4 diverse areas provides a unique opportunity to address the impact of these factors. The current proposal intends to investigate the relationship between marital status and mortality (CHD and all-cause), examining race and gender differences.

5. Main Hypothesis/Study Questions:

1) Compare to married people, it is expected that the never married, divorced/separated and widowed are at higher risk for CHD mortality and all-cause mortality.
2) Widowed individuals are at a higher risk of mortality than divorced/separated people.
3) Though African Americans have higher mortality due to CHD related events, their mortality is expected to be less affected by their marital status.
4) It is expected that dissolution of marriage will have a greater impact on mortality in men than in women.

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

Marital Status variables: Marital status was collected at visit 2.

Outcome variables: Surveillance data up to December 31, 1999 (all cause mortality and CHD mortality)

Demographic variables: age, gender, race, ARIC center, etc.

Key covariates to be adjusted for:

1) Potential vascular confounding variables: diabetes, hypertension, total cholesterol, LDL cholesterol, smoking status, etc.

2) Living alone or living with others, number of children, and employment status of the marital partners

Exclusion criteria: prevalent CHD at visit 2.

7.a. Will the data be used for non-CVD analysis in this manuscript?  ____ Yes  ___ No
b. If Yes, is the author aware that the file ICTDER02 must be used to exclude persons with a value RES_OTH = “CVD Research” for non-DNA analysis, and for DNA analysis RES_DNA = “CVD Research” would be used? Yes No
(This file ICTDER02 has been distributed to ARIC PIs, and contains the responses to consent updates related to stored sample use for research.)

8.a. Will the DNA data be used in this manuscript? Yes No

8.b. If yes, is the author aware that either DNA data distributed by the Coordinating Center must be used, or the file ICTDER02 must be used to exclude those with value RES_DNA = “No use/storage DNA”? Yes No

9. The lead author of this manuscript proposal has reviewed the list of existing ARIC Study manuscript proposals and has found no overlap between this proposal and previously approved manuscript proposals either published or still in active status. ARIC Investigators have access to the publications lists under the Study Members Area of the web site at: http://bios.unc.edu/units/csc/ARIC/stdy/studymem.html

Yes No

10. What are the most related manuscript proposals in ARIC (authors are encouraged to contact lead authors of these proposals for comments on the new proposal or collaboration)?

No overlap to the author’s knowledge.

REFERENCES
5. Ilfeld FW. Understanding marital stressors the importance of coping styles. J of Nerv. and Ment. Disease. 1980; 168 (6) 375-381.