

Dissatisfaction with Married Life is Related Dose-Response to Increased CHD and Stroke Mortality and is Associated with Marked Reduction in Probability of Surviving Past age 80 years

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Rationale and design. Despite evidence accumulating over long years concerning possible roles of personal issues in affecting the health of vascular system, there is no unequivocal agreement on the exact parameters and magnitudes representing such association. We conducted an extensive study of demographic and personal, educational, anthropometric, biochemical and clinical variables among civil servants and municipal employees in 1963-68. Cause-specific mortality follow-up through 1986 permits analyzing of the latter as a function of those parameters. All-cause mortality is available through 2006, permitting ascertainment of survival past age 80- for every participant in the study.

Methods. Every subject responded in 1965 (N=9343) whether he considered his marriage successful, quite successful, not so successful or unsuccessful. 398 were unmarried. Mortality was ascertaining by matching with the national death registry using eth national ID and verifying names. Underlying cause of death was determined from ICD-8, ICD-9 and ICD-10 coding with a re-ascertainment and editing process at the central Bureau of Statistics.

Results. Mortality per 10,000 person years increased, with increasing dissatisfaction" from "quite successful" to unsuccessful marriage, for all-cause, CHD and stroke mortality (Table). Adjusting for age indicated Cox PH -estimated hazard ratios (HR) of 1.08 95% CI 0.95-1.24, 1.09 (0.86-1.38 and 1.16 (0.82-1.62) for the quite-, not quite- and unsuccessful marriage for death of CHD; 0.95 , 1.16 and 2.06 (1.31-.3.23) respectively for stroke mortality; and 1.02, 10.07 and 1.35 (1.13-1.61) for all-cause 23-year mortalities (p for trend<.01) for all endpoints. Further, 38% of those reporting unsuccessful marriage survived past age 80 as compared to 46-37% in the other three "success categories". In logistic regression the odds of surviving past age 80 years were 1.01, 0.97 and 0.69 (0.54-0.87) for the above three categories. In all of the above analyses, further adjustment for smoking, Socio-economic status, blood pressure, diabetes, socioeconomic status and serum cholesterol did not alter the results materially.

Conclusion. Through mechanism that require study unhappy marriage shows association with long-term mortality from vascular causes and hampers the aspiration of male working males to survive past age 80.

T a b l e : Mortality rates by reported success of marriage

Marriage successful?	CHD mortality	Stroke Mortality	All-cause Mortality
Very successful	51.9	17.5	164
Quite successful	52.2	15.1	155
Not so successful	53.5	18.7	165
Very successful	59.0	35.1	217