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Marital Quality and Risk Factors for CHD

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INTRODUCTION

Epidemiological research indicates that marriage may significantly protect individuals from various causes of morbidity and mortality including cardiovascular disease^{6,7}. There is also growing evidence that marital quality may be equally if not more important than marital status. While married individuals have greater health benefits relative to unmarried individuals, unhappily married individuals may be worse off than unmarried⁸⁻¹⁰. For instance, marital distress has been associated with a 2 to 3 fold increase in the risk of heart disease¹¹ and for recurrent coronary events¹².

OBJECTIVE

Research has demonstrated marital quality or distress is associated with coronary heart disease (CHD). Therefore, marital quality should also be associated with relevant established risk factors.

METHODS

The Dyadic Adjustment Scale (DAS) and risk factors for CHD were obtained at a baseline assessment.

The total score on the DAS and satisfaction subscale were used in analyses to assess level of marital distress and satisfaction respectively.

Risk assessments included

- 24-hour ambulatory blood pressure (ABP),
- C-reactive protein (hs-CRP)
- cholesterol
- fasting glucose

PARTICIPANTS

To test our hypothesis, 31 married couples (n=62; including normotensive, pre-hypertensive, and un-medicated hypertensive) seeking marital therapy were recruited via advertisement from the community or at clinic intake.

- Ages 19-59
- Approximately 36% normotensive; 50% pre-hypertensive; 14% hypertensive.

RESULTS

Lower Marital Adjustment (Marital Distress) Was Associated With Significantly Higher

- 24-h SBP($\beta=-.26$; $p<.05$),
- Fasting Glucose ($\beta=-.30$; $p<.01$),
- hs-CRP ($\beta=-.23$; $p<.05$)

Trend toward higher

- 24-h DBP ($\beta=-.24$; $p<.10$),
- total cholesterol ($\beta=-.16$; $p<.10$),
- very-low density lipoproteins (VLDL; $\beta=-.18$; $p<.10$),
- triglycerides ($\beta=-.17$; $p<.10$)
- Chol/HDL ratio ($\beta=-.19$; $p=.06$).

High Marital Satisfaction Was Associated With Significantly Lower

- 24-h SBP($\beta=-.27$; $p<.05$),
- Fasting Glucose ($\beta=-.34$; $p<.01$),
- hs-CRP ($\beta=-.29$; $p<.05$),
- VLDL ($\beta=-.23$; $p<.05$),
- Chol/HDL ratio ($\beta=-.23$; $p<.05$);

Trend toward lower

- 24-h DBP ($\beta=-.23$; $p<.10$),
- cholesterol ($\beta=-.17$; $p<.10$)
- triglycerides ($\beta=-.18$; $p<.10$).

Level of Inflammation by Level of Marital Distress



CONCLUSION

Marital distress and satisfaction are associated with 24-hour Ambulatory Blood Pressure, inflammatory response, glucose, and cholesterol. Modifiable heart disease risk factors including BP and Cholesterol have each been linked to psychosocial stressors. Likewise, chronic stress has been linked to inflammation that confers risk for heart disease³³. However, to our knowledge this is the first study to date to establish a link between marital quality/distress and inflammation (hs-CRP). Knowing the pathways by which risk factors may be reduced will assist in carefully informing interventions and potentially different entry points for intervention (e.g., health behaviors, relationship positivity or negativity, etc.). Empirical investigations are needed to test whether interventions aimed at reducing marital distress or increasing satisfaction might also result in lower risk factors for CHD.

REFERENCES

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