COMMUNITY-BASED, PRIMARY PREVENTION PROGRAMS IMPROVE PSYCHOLOGICAL AND CARDIOVASCULAR HEALTH

ACC Moderated Poster Contributions
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Background: An increasing amount of evidence suggests that there is a relationship between psychosocial factors and cardiovascular health. This effect may be greatest among low income and minority patients. More research is needed determine the best way to reduce these psychological stressors, while improving overall cardiovascular health.

Methods: Sixty-four low-income and minority women with at least two preexisting cardiovascular risk factors were enrolled in a community-based, lifestyle intervention program - The HAPPY Heart Program. Patients were cared for over two years by a multidisciplinary team including: primary physician, cardiologist, nutritionist, physical therapist and health coach. Using validated psychological tools, STAI (anxiety), CESD-10 (depression) and PSS (stress), the levels of each were measured and baseline, year 1 and 2. Changes in psychological stress were then compared to changes in cholesterol and insulin resistance (HbA1c and BMI).

Results: Women enrolled in our lifestyle intervention program saw significant decreases in anxiety (p=0.004), depression (p=0.032) and stress (p=0.006) at year 1. By year 2, the levels decreased further: anxiety (p=0.0003), depression (p=0.006) and stress (p=0.0015). Further analysis revealed that higher baseline levels of anxiety (p=0.024/p=0.06), depression (p=0.26/p=0.04) and stress (p=0.28/p=0.03) were associated with higher baseline LDL levels. In addition, higher baseline depression (p=0.33/p=0.03) and stress (p=0.42/p=0.004) scores were associated less improvement in HbA1c during the first year of follow up. However, improvement in anxiety levels over time, were significantly associated with decreases in HbA1c (p=0.34/p=0.02) and BMI (p=0.45/p=0.002) over the same time period.

Conclusion: In this “high risk,” low income, minority population of women, a comprehensive, lifestyle intervention program significantly decreased levels of anxiety, depression and stress. This is important because baseline psychological stress was associated with higher baseline LDL levels and higher HbA1c levels. However, decreases in anxiety were significantly correlated with decreases in HbA1c and BMI over time.