Problem: Cardiac disease, diabetes and obesity, leading causes of death and disability, have well established clinical practice guidelines for screening, lifestyle and pharmacological management. Heightened awareness of risk may influence health promotion activities.

Evidence: Objective measures ((height, weight, waist circumference, blood pressure, blood lipids and glucose) provide information on cardiac, diabetes and other chronic illness risks. Family history of disease is a predictive risk factor for diabetes (Harrison, et al. 2003), selected cancers (Ziogas & Anton-Culver, 2003), asthma (Burke, et al. 2003), and coronary artery disease (Hunt et al., 2003; Kardia et al, 2003). Individualized counseling using FH data with objective data may improve patient compliance with risk reduction by increasing awareness of risk (McNeill et al, 2008).

Strategy: Test if the addition of FH data to individualized counseling on objective risk factors influences intent and actual exercise behavior over time.

Practice Change: Intervention groups received individualized counseling at baseline; at 6 month assessment, participants in control groups crossed over to the intervention. Objective and subjective measures (stages of change regarding exercise behavior, awareness of heart disease risk, acculturation, spirituality, depression, and online FH) measured the variables.

Evaluation: Ninety-three working adults were randomly assigned to an intervention or control group. Participants were primarily female, married, Catholic, Hispanic with mean age of 45 years. At baseline, only 27% had a “normal” BMI; 15% had blood pressures > 140/90; 28% had total cholesterol levels > 200 mgm/dL. Of 63 subjects with FH data, half had sufficient health knowledge. Almost half reported one or more FDRs with heart disease or hypertension; 22 (36%) with diabetes, 16 (26%) with cancer. At 6 months, no significant changes in objective risks were found except for trends in increased HDL and reduced triglycerides. Participants showed some movement to exercise change from each stage of recontemplation/contemplation to the Action phase. Conclusions are limited by small sample size.

Recommendations/Lessons Learned: Whether the web-based family history tool increases exercise behavior needs further study.

Bibliography/References


