POLICY BRIEF

Adapting heart disease prevention for older women with diabetes: evidence-based possibilities

Translational Behavioral Medicine

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POLICY IMPLICATIONS

1. Implementation science frameworks such as RE-AIM can be used to inform evidence-based interventions that can be promoted through policies.
2. As the strength of the evidence builds for these adapted interventions, policies that facilitate health care provider participation can result in positive health outcomes for high-risk populations.

RESEARCH IMPLICATIONS

1. These trials show that successful interventions for CHD risk reduction can be adapted to subsets of the population. Evaluating the intervention in other high-risk populations will strengthen evidence for feasibility and effectiveness of dissemination.
2. The intensity of the interventions on which the WLHT and MLP were based was reduced for these trials. Future studies should identify the minimum interaction needed to produce significant results.
3. Strategies to enhance social connectedness in intervention populations through mobile technologies or social media should be explored.

Reversing heart disease—Coronary heart disease (CHD) remains a major public health concern. However, there have been significant advancements in successful interventions to reduce heart disease risk factors and reverse CHD. The Ornish comprehensive lifestyle program consists of a very low-fat diet, smoking cessation, stress management training, moderate exercise, and group support. This intensive program and others similar in structure have resulted in significant improvements in behavioral, psychosocial, quality of life, and heart disease risk factors. While successful, it is unclear whether these programs could be disseminated efficaciously to high-risk populations, particularly older women and Latinas.

Adaptation—A recent study sought to determine whether the substantial cardiovascular benefits among men reported in the trials on the Ornish program could be replicated in postmenopausal women with CHD. This intervention study, the Women's Lifestyle Heart Trial (WLHT), combined the Ornish program with an evidence-based diabetes self-management program which focused on self-efficacy and problem solving. The WLHT demonstrated that the Ornish program was feasible and effective in a sample of women who had CHD.

This program was again adapted to test whether it would be effective in comorbid, female populations. The first trial of this adapted intervention, called Mediterranean Lifestyle Program (MLP), targeted the same risk-reducing behaviors with shortened intensity to women with type 2 diabetes who were at high risk for CHD. The second trial, Viva Bien!, was tailored to Latinas with type 2 diabetes who received health care from a large HMO or community center. In addition to dietary behaviors, physical activity, stress management practices, smoking status, and quality of life, the evaluation of these trials included RE-AIM factors of Reach, Effectiveness, Adoption, Implementation, and Maintenance.

Reach—Both trials drew relatively diverse samples of older women, many of whom were low income and with high school education or less. Most participants were overweight and had chronic illnesses besides diabetes.

Effectiveness—Both trials showed consistent improvements in most of the health-related outcomes, but neither study significantly affected quality of life.

Adoption—There were high levels of adoption in both trials. All primary care clinics approached and all physicians within these clinics referred their patients to the study.

Implementation—Staff delivered the program with high fidelity, but participant attendance decreased over time. Cost per participant and per unit reduction in outcomes was moderate.

Maintenance—Long-term intervention effects were present, but differences between intervention and control conditions were reduced over time. No medical practice involved in the study continued the program through its own resources once the intervention ended.

BOTTOM LINE:

With guidance from the RE-AIM framework, adaptation of interventions for subsets of the population with high risk for CHD can be feasibly and effectively implemented.