

Title of Intervention: Cardiovascular Disease Risk Reduction for Tenth Graders

Intervention Strategies: Group Education

Purpose of the Intervention: To develop cardiovascular disease prevention behaviors in older adolescents

Population: Tenth-grade students

Setting: Four senior high schools from two school districts in northern California; school-based

Partners: School Districts, Stanford Center for Research in Disease Prevention

Intervention Description:

- Group Education: Students attended 20 classroom sessions. Each session lasted 50 minutes. The sessions were divided among five program modules (Physical Activity, Nutrition, Cigarette Smoking, Stress and Personal Problem Solving). Each module provided students with information on the effects of different health practices. The program was designed to increase the attractiveness of healthful lifestyles, cognitive and behavioral skills enabling them to change personal behavior. The sessions included problem solving training. Each student was asked to carry out a self-change project.

Theory: Social Cognitive Theory

Resources Required:

- Staff/Volunteers: Program coordinator, teachers
- Training: Not mentioned
- Technology: Not mentioned
- Space: Classrooms
- Budget: Not mentioned
- Intervention: Materials needed for education sessions
- Evaluation: Questionnaires, carbon monoxide monitors, breath-sample bags, standard balance beam scale, skin fold calipers, automated blood pressure device

Evaluation:

- Design: Randomized control trial
- Methods and Measures:
 - Questionnaire assessed knowledge of physical activity, nutrition/diet and cigarette smoking
 - A physical activity checklist determined exercise levels
 - A nutrition checklist assessed food preferences
 - Tobacco use was measured using a survey and carbon monoxide monitors
 - Height and weight were measured on a standard balance beam scale
 - Skin fold calipers were used to measure triceps and subscapular muscles
 - Automated blood pressure device measured resting heart rate and blood pressure

Outcomes:

- Short term Impact: Intervention group students had significantly greater gains in risk factor knowledge gains (nutrition/diet, physical activity and smoking). There were positive trends in physical activity, smoking and eating behaviors.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: Not mentioned

Citation(s):

Killen, J. D., M. J. Telch, et al. (1988). "Cardiovascular disease risk reduction for tenth graders. A multiple-factor school-based approach." *Jama* 260(12): 1728-33.