

Title of Intervention: Cardiovascular Dietary Education System (CARDES)

Intervention Strategies: Group Education, Individual Education, Supportive Relationships

Purpose of the Intervention: To facilitate reductions in intake of dietary fat, cholesterol and sodium through behaviorally oriented nutritional counseling

Population: African-American adults aged 40 to 70 years at risk for cardiovascular events

Setting: Urban Washington D.C. area; community-based

Partners: None mentioned

Intervention Description:

- Group Education: Participants in the full-instruction group were invited to attend monthly nutrition classes during the first four months after enrollment. The classes reinforced messages presented in other CARDES materials. Participants in the full-instruction group received full color nutritional food cards, a 42-page nutrition guide to supplement the food cards, "A Family Learns to Change" video about the psychosocial context for behavioral change, audiotapes with essential dietary intake instructions and a portable cassette player.
- Individual Education: Participants in the individualized self-help group received the food cards and nutrition guide. Participants in the full instruction group received supplemental behavior change worksheets.
- Supportive Relationships: All participants received counseling, which was designed to motivate and reinforce self-directed learning. Counseling was provided by a nutritionist at baseline and every four months for the 12-month trial period.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Nutritionist, trained group facilitators
- Training: Training for group facilitators
- Technology: Computer
- Space: Group meeting space, private meeting space for individual counseling
- Budget: Not mentioned
- Intervention: CARDES Materials (food cards, nutrition guides, "A Family Learns to Change" video, audiotape series, worksheets, portable cassette player)
- Evaluation: Sphygmomanometer, blood pressure cuffs, venous blood sample materials, sodium excretion urine sample test, clinical laboratory to determine lipid levels and sodium excretion, stadiometer, weight scale, questionnaire

Evaluation:

- Design: Randomized trial
- Methods and Measures:
 - Health Status questionnaire
 - Usage of CARDES Materials questionnaire
 - Literacy Score Test
 - Rate Your Plate questionnaire
 - Food consumption frequency survey

Outcomes:

- Short Term Impact: At 12 months, treatment participants with initial elevated baseline blood pressure had significant reductions in systolic and diastolic blood pressures. With increasing use of the CARDES materials, a decrease was observed for lipid and blood pressure. There were positive trends in weight reduction.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: Self-directed instruction may yield similar results to more didactic methods. The general success of the CARDES program among this diverse sample of African-American adults, including retention of 75% of the study participants over a 1 year period and the clinical outcomes achieved with minimal professional counseling, challenges the assertion that population who do not respond to conventional approaches are hard to reach. Incorporating a specific weight-reduction component into CARDES might result in greater clinical benefits.

Citation(s):

Airhihenbuwa, C. O., S. Kumanyika, et al. (1995). "Perceptions and beliefs about exercise, rest, and health among African-Americans." *Am J Health Promot* 9(6): 426-9.

Airhihenbuwa, C. O., S. Kumanyika, et al. (1996). "Cultural aspects of African American eating patterns." *Ethn Health* 1(3): 245-60.

Kumanyika, S. K., L. Adams-Campbell, et al. (1999). "Outcomes of a cardiovascular nutrition counseling program in African-Americans with elevated blood pressure or cholesterol level." *J Am Diet Assoc* 99(11): 1380-91.