

Title of Intervention: MULTIFIT

Intervention Strategies: Individual Education, Environments and Policies

Purpose of the Intervention: To minimize the risk factors which contribute to morbidity and mortality in patients who have had acute myocardial infarction

Population: Men and women aged 70 years or younger who were hospitalized for acute myocardial infarction

Setting: Five Kaiser Permanente Medical Centers in the San Francisco Bay area; health care facility-based, home-based

Partners: None mentioned

Intervention Description:

- Environments and Policies: For patients with certain levels of cholesterol and triglycerides, MULTIFIT nurses initiated lipid-lowering drug therapy.
- Supportive Relationships: Based on individual risk assessments, MULTIFIT nurses initiated interventions for smoking cessation, exercise training and diet therapy for high cholesterol. All medically eligible patients received exercise training. All smokers received the smoking cessation intervention. All patients received dietary counseling. Nurses monitored side effects and evaluate drug responses based on laboratory results and patients telephone interviews. A nurse assessed each patient's emotional state to determine if further counseling was needed. The intervention after discharge was implemented primarily by telephone and mail contact with patients in their homes. Nurse connected with the patient multiple times throughout the year following the start of the program in order to monitor and encourage patients to continue to adhere to recommendations.

Theory: Social Learning Theory

Resources Required:

- Staff/Volunteers: Trained nurses, physicians for consult, nutritionists for consult/referrals
- Training: 80-hour MULTIFIT training course for nurses
- Technology: Audiovisual equipment, computer, software to analyze nutrition and make diet recommendations, telephone
- Space: Not mentioned
- Budget: \$552/patient
- Intervention: Informed consent forms, 16-minute videotape on smoking from the Active Partnership series, contracts for adherence to recommendations, *Good Eating for Good Health* dietary workbook, lipid-lowering medication, medication calendar, *Active Partnership* exercise workbook and videotape, mailing materials
- Evaluation: Heart rate monitor, daily activity log, treadmill exercise test, laboratory tests, Functional Capacity Evaluation, psychosocial questionnaire, smoking history and self-efficacy questionnaire, item Food Frequency and a self-efficacy questionnaire, nutrition questionnaires

Evaluation:

- Design: Randomized controlled trial
- Methods and Measures:
 - Laboratory Tests
 - Functional Capacity Evaluation
 - Smoking history and self-efficacy was measured by self report and expired carbon monoxide
 - Cholesterol levels were assessed by the Friedwalk method
 - Exercise testing on a treadmill using the Naughton and Balke protocol
 - Food frequency questionnaires and dietary recall assessed diet behaviors and self-efficacy
 - Daily activity log
 - Psychosocial questionnaire

Outcomes:

- Short Term Impact: Analysis showed positive trends in fat and cholesterol intake, smoking (significant), cholesterol levels (significant) and physical activity knowledge.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: Case-management provides convenient, individualized and effective medical care at low cost. A large portion of the people in the control group who were eligible for lipid lowering medication were not prescribed any. This is believed to have happened because health care providers were not as familiar with lipid lowering medication protocol.

Citation(s):

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