**Evaluation of a medical self-care program in a hospital population.**

By: Fitzhugh, E.C.*, Eddy, J.M., & Hilyer, J


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**Abstract:**
Medical self-care programs have captured the attention of health promotion professionals, especially within worksite settings. The basic premise of medical self-care is that if employees or clients can be taught to make responsible and informed decisions about medical problems, they will use the health care delivery system more wisely. Numerous researchers (Kemper, 1982; Vickery 1983, Roberts, 1983 and Long 1985) have highlighted both the effectiveness and cost-effectiveness of medical self-care programs. The purpose of this "Research Brief" is to discuss the impact of a structured medical self-care program implemented in a hospital worksite.

**Article:**

**Subjects**
Employees from the Baptist Medical Centers (N=338) volunteered to sign-up for the medical self-care program. No analysis of the make-up of the study population was performed. Therefore, the demographic nature of this group of volunteers to the entire BMC population is not known.

**Program Intervention**
Employees enrolled in a 30 minute medical self-care training session which provided the following information: 1) an overview of medical self-care; 2) a review of two texts used in the program, Take Care of Yourself (Vickery and Fries, 1990) and Taking Care of Your Child (Pantel, Fries and Vickery, 1990); 3) examples of medical problems where use of the medical self-care materials would be appropriate; and 4) a simulation activity designed to encourage employee interaction with materials.

At the completion of the program, employees were asked to sign a pledge card to indicate that they were comfortable and willing to use the materials to help them make appropriate medical self-care decisions. Upon signing the pledge cards, employees were given the appropriate textbooks (up to a $15 value) as an incentive. At three months, employees were given a follow-up phone call reminding them to use the materials provided.

**Program Evaluation**
The medical self-care program was evaluated through the use of the pledge card, a follow-up anonymous survey and the gathering of testimonial statements. The pledge cards serve two basic purposes. First, it provided a measure of participant self-efficacy and level of commitment to make medical self-care decisions. Second, it gave the program provider an indication if they were successful in communicating the basic concepts and benefits of medical self-care-care. Six months following the completion of the medical self-care program an anonymous survey was sent to a random sample of BMC employees. The purpose of the instrument was to assess outcomes from all phases of Health at Work, BMC's Employee Health Promotion program. On these surveys, employees who participated in the medical self-care program were asked if they had used the materials to 1) make wise medical self-care decisions; 2) prevent an unnecessary physician visit; and/or 3) prevent an unnecessary emergency room visit. In addition, employees were encouraged to send commentary on how they used the materials to the office of the corporate health promotion manager.
Results
Three hundred thirty eight employees completed the medical self-care program and signed the pledge cards. After completing the program, only four employees declined to sign the pledge card expressing personal doubt concerning their ability to use the materials provided to make consumer decisions.

Results of the follow-up random sample survey found that 55.4% of those surveyed (N=78) who completed the medical self-care program indicated that they used the materials to prevent an unnecessary visit to their physician and 48.8% indicated that they used the material to prevent an unnecessary emergency room visit. The Employee Benefits Office at BMC provided a conservative estimate of the average cost of a physician visit ($45) and emergency room visit ($125). Using these figures, cost-benefit calculations were generated by extending the result of the random sample survey to all program participants (See Table 1 ). A cost benefit ratio of 1 to 4.43 was estimated.

With regard to the subjective program evaluation components, 64 program participants submitted commentary of how they used the medical self-care materials, and their perceived benefits of having access, and their confidence in using these materials. Two such testimonials are provided below:

• S.S. Medical Records
  "My husband had a strange reoccurring illness which would come and go and we couldn't figure out what it was. The book, Tare Care of Yourself, according to the symptom finder, told us to make an appointment with our doctor, which we did. He ended up having meningitis."

• M. R. Environmental Services
  "My husband had a tick attached to his shoulder. We followed the guidelines for tick bites and I watched for a month for fever, rash or headaches. Without this book, we would have been at the ER the night we found the tick."

These commentaries were selected to provide an indication of how these materials were used by employees to seek and not to seek treatment when appropriate.

Discussion
This research brief provides an overview of the outcome of a medical self-care program implemented within a group of hospital employees. The cost-benefit ratio is an estimation because it is more difficult to calculate potential economic savings from employees who seek appropriate medical care and who implement some of the prevention activities outlined in the materials. Clearly, the medical self-care program at The Baptist Medical Center was effective in encouraging employees to be wise consumers of medical care services and subsequently yielded a positive cost-benefit ratio.
**Table 1: Cost-Benefit Projections for BMC’s Medical Self-care Program**

**Program Costs**

1. 338 X $15 (Cost of Materials)  
   $5,070.00
2. Staff Time to Conduct Sessions 3  
   0 Sessions X $15 Per Sessions  
   $450.00
3. Misc. Cost-Publicity,  
   Printing, Phone Calls  
   $650.00

   Total Program Cost:  
   $6,170.00

**Cost Savings**

1. Reduced Physician Visits  
   338 X .488 X $125  
   $8,426.00
2. Reduced E.R. Visits  
   338 X .$125  
   $18,928.00

   Total Cost Savings:  
   $27,354.00

**Cost Benefit Ratio**

Cost Savings (27,354) Programs Costs (6,170) = 1 to 43

**Reference**


Lorig, K. (1985) "A Workplace Health Education Program that Reduces Outpatient Visits" Medical Care 23 (9),1044-1054.


Vickery, D. M. (1983) "Effects of a Medical Self-Care Education Program on Medical Visits" JAMA 250(21), 2952-2956.