

Title of Intervention: Computer-based program for patients with heart failure

Intervention Strategies: Group Education, Individual Education

Purpose of the Intervention: To educate older adults about heart failure

Population: Older adult heart failure patients released from the heart failure unit

Setting: University Hospital of Malmo in Sweden; health care facility-based

Partners: None mentioned

Intervention Description:

- Group Education: In the control group, education sessions were provided to small groups of 2-4 individuals. A nurse educated groups about heart failure. A pharmacist educated groups about heart disease related drugs. Leaflets with basic information on effects and side effects of certain drugs were distributed based on the medications prescribed to individuals.
- Individual Education: Subjects in the intervention group completed an interactive computer program that educated and quizzed subjects on signs and symptoms of heart failure and the effects and side effects of diuretics.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Nurse, pharmacist
- Training: Not mentioned
- Technology: Computer
- Space: Room for classes and computer session
- Budget: Not mentioned
- Intervention: Booklets, leaflets, the computerized education program
- Evaluation: Questionnaires, access to medical records

Evaluation:

- Design: Randomized controlled trial
- Methods and Measures:
 - Questionnaire measured knowledge of heart failure and its treatment
 - Hospital records were used to obtain information on length of hospital stay, medication at discharge and diagnosis of diabetes
 - Three heart failure nurses evaluated how the patients used the program and their attitudes towards the computer
 - Personal interviews were conducted with a small portion of randomly selected patients by a registered nurse

Outcomes:

- Short term Impact: Individuals in the intervention group had significantly higher knowledge of heart failure and treatment at both 2.5 months and 6.5 months.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: The computer program was developed by a multidisciplinary group. It had large, clear illustrations and buttons. All patients could use the program, regardless of past experience with computers. The patients were satisfied with the computer-based information. They appreciated that the program was interactive, flexible and contained a self-test. They thought it was a better way of receiving information than reading a booklet or watching a video about heart failure. The nurses reported that the patients were positive

towards the computer and seemed to understand the information. This form of patient education was less time-consuming.

Citation(s):

Liedholm, H, A.B. Linne, et al. (1996). "The development of an interactive education program for heart failure patients: the Kodak Photo CD Portfolio concept." *Patient Ed and Counseling* 29(): 199-206.

Linne, A. B., H. Liedholm, et al. (1999). "Effects of systematic education on heart failure patients' knowledge after 6 months. A randomised, controlled trial." *Eur J Heart Fail* 1(3): 219-27.