Title of Intervention: Computer-based Instruction for Adults with Asthma

Intervention Strategies: Individual Education, Supportive Relationships

Purpose of the Intervention: To reduce dust mite allergens in the home

Population: Adults with atopic asthma

Setting: Home-based

Partners: None mentioned

Intervention Description:

- Individual Education: The intervention group received a 22-minute video as part of a computer program that covered encasing mattresses, box springs and pillows, removing carpeting and upholstered furniture, laundering bedding in hot water and controlling indoor temperature and humidity. The program asked the participant questions throughout and recorded understanding of the information.
- Supportive Relationships: Participants received counseling from a health care provider on reducing environmental triggers for asthma. All participants regardless of intervention group had two home visits. The home visitors objectively surveyed the home and the dust mite allergen measures taken.

Theory: None mentioned

Resources Required:

- Staff/Volunteers: Health care provider
- Training: Home visitors were trained on objective measures tools
- Technology: Computers
- Space: Space for computer-based education session
- Budget: Not mentioned
- Intervention: Program software, video
- Evaluation: Home visitors

Evaluation:

- Design: Experimental
- Methods and Measures:
    - Home visitors assessed homes with an Observation Checklist of Environmental Control tool.
    - A self-rating scale assessed participant perceptions of house dust mites.

Outcomes:

- Short Term Impact: The intervention group had significantly greater adherence scores than the comparison group.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: For house dust mite allergic individuals with asthma who are having persistent symptoms, a home visit to assess the environment might be helpful.

Citation(s):

Huss, K., M. Salerno, et al. (1991). "Computer-assisted reinforcement of instruction: effects on adherence in adult atopic asthmatics." Res Nurs Health 14(4): 259-67.