

**Title of Intervention:** Group Exercise Program for Children

**Intervention Strategies:** Group Education, Individual Education

**Purpose of the Intervention:** To improve physical condition and coping in children with asthma

**Population:** Children ages 8-13 with asthma

**Setting:** Gymnasium and in the home; community-based, home-based

**Partners:** None mentioned

**Intervention Description:**

- Group Education: The physical exercise program consisted of group exercises twice a week for one hour in a gymnasium. The lessons in the gymnasium started with 10 minutes warming-up, followed by 20 minutes of fitness training and 15-20 minutes of different physical activities. Before or after the exercise, explanation and information was given to the child about asthma and exercise to improve coping behavior with asthma.
- Individual Education: The participants had one 20-minute exercise session per week at home. Preventive medication was taken before training as prescribed by the child's pediatrician.

**Theory:** Not mentioned

**Resources Required:**

- Staff/Volunteers: Instructors
- Training: Not mentioned
- Technology: Not mentioned
- Space: Gymnasium, participants' homes
- Budget: Not mentioned
- Intervention: Exercise routines
- Evaluation: Exercise tests, interview protocol, questionnaire

**Evaluation:**

- Design: Randomized controlled trial
- Methods and Measures:
  - Maximum incremental exercise tests measured integrated flow, gas concentrations and heart rate.
  - Endurance tests were done on a treadmill.
  - A Self-Perception Profile for Children measured perceived competence.
  - An Asthma Coping Test for children 8-13 years was conducted.
  - Parent and child interviews assessed their experiences with the program, how the child was doing during and after the program and their opinion of the program.

**Outcomes:**

- Short Term Impact: The results showed significant effects of the intervention program on physical condition, including maximal workload, endurance and heart rate. There was also a significant positive effect on coping with asthma.
- Long Term Impact: Not measured

**Maintenance:** Not mentioned

**Lessons Learned:** Children with asthma should be encouraged to engage in life-time sports and exercise.

**Citation(s):**

van Veldhoven, N. H., A. Vermeer, et al. (2001). "Children with asthma and physical exercise: effects of an exercise programme." Clin Rehabil 15(4): 360-70.