

Title of Intervention: Home-based Family Education to Improve Medication Adherence

Intervention Strategies: Group Education

Purpose of the Intervention: To increase medication adherence among children with asthma

Population: Inner-city African American children with asthma and their families

Setting: Home-based

Partners: None mentioned

Intervention Description:

- Supportive Relationships: A nurse visited families in their homes weekly 4-5 times to deliver the intervention. A common theme throughout all visits was to involve both the child and the mother in creating an environment that would foster the regular use of preventive asthma medications. The nurse modeled how to assess adherence, provided feedback, responded appropriately to non-adherence, and offered reinforcement for the mothers during each visit.
- Individual Education: The intervention was tailored to each family's barriers to medication use. The main aims included problem-solving strategies and opportunities, enhanced self-efficacy in parents and children for medication adherence and ongoing feedback to link medication use with asthma control and goals. Clear roles for family members were established and weekly goals were negotiated between the parent and the child with the assistance of the nurse. A unique aspect of this intervention was the utilization of electronic metered dose inhaler monitors to provide immediate feedback on medication use to families and to record adherence.

Theory: Social Learning Theory

Resources Required:

- Staff/Volunteers: Nurses
- Training: Not mentioned
- Technology: Metered dose inhaler monitor
- Space: Access to homes
- Budget: Not mentioned
- Intervention: Educational materials
- Evaluation: Metered dose inhaler monitors

Evaluation:

- Design: Pilot study
- Methods and Measures:
 - Metered dose inhaler monitors recorded participant's inhaler use.

Outcomes:

- Short Term Impact: Medication use increased greatly. Medication underutilization greatly decreased.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: An intervention that is tailored to the needs of the family and delivered in the home by a nurse shows real promise of increasing medication adherence among inner-city school age children with asthma.

Citation(s):

Bartlett, S. J., P. Lukk, et al. (2002). "Enhancing medication adherence among inner-city children with asthma: results from pilot studies." *J Asthma* 39(1): 47-54.