

Adapting and implementing an evidence-based asthma counseling intervention for resource-poor populations.

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Abstract

OBJECTIVE:

To report implementation strategies and outcomes of an evidence-based asthma counseling intervention. The Head-off Environmental Asthma in Louisiana (HEAL) intervention integrated asthma counseling (AC) capacity and addressed challenges facing children with asthma in post-disaster New Orleans.

METHODS:

The HEAL intervention enrolled 182 children (4-12 years) with moderate-to-severe persistent asthma. Recruitment occurred from schools in the Greater New Orleans area for one year. Participants received home environmental assessments and tailored asthma counseling sessions during the study period based on the National Cooperative Inner City Asthma Study and the Inner City Asthma Study. Primary (i.e., asthma symptoms) and secondary outcomes (i.e., healthcare utilization) were captured. During the study, changes were made to meet the demands of a post-hurricane and resource-poor environment which included changes to staffing, training, AC tools, and AC sessions.

RESULTS:

After study changes were made, the AC visit rate increased by 92.3%. Significant improvements were observed across several adherence measures (e.g., running out of medications ($p = 0.009$), financial/insurance problems for appointments ($p = 0.006$), worried about medication side-effects ($p = 0.01$), felt medications did not work ($p < 0.001$)). Additionally, an increasing number of AC visits was modestly associated with a greater reduction in symptoms (test-for-trend $p = 0.059$).

CONCLUSION:

By adapting to the needs of the study population and setting, investigators successfully implemented a counseling intervention that improved participant behaviors and clinical outcomes. The strategies for implementing the AC intervention may serve as a guide for managing asthma and other chronic conditions in resource-poor settings.

KEYWORDS:

Asthma counselors; case management; chronic disease counseling; environmental triggers; post-disaster

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