

SCHOOL-BASED INTERPROFESSIONAL ASTHMA SELF-MANAGEMENT PROGRAM FOR MIDDLE SCHOOL STUDENTS: A FEASIBILITY TRIAL

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Background: Asthma disproportionately affects urban youth and their self-management is further limited by access to specialty programs. Study questions were: 1) What is the feasibility of implementing a school-based program specific for asthma self-management education, 2) What are changes in asthma self-management, symptoms, and use of an Asthma Action Plan during the program, 3) What are changes in symptoms, asthma responsibility, self-efficacy, and school attendance and performance from before to after the program?

Methodology: This quasi-experimental IRB-approved study examined effects of an interprofessional assessment/education for middle school students with asthma from a Medically Underserved Area. Instruments included Asma-Trax® management software, spirometry, Asthma Responsibility Questionnaire, self-report diaries, school attendance, and others. *Power Breathing for Teens*TM was delivered using a blended format of live and outside activities. **Results:** The program was begun with 9 middle school students (minority or otherwise at-risk; one withdrew) and 13 nursing, respiratory therapy (NS/RT) interprofessional students. Computing students participated in formulating a web portal and Android app. Spirometry revealed that all teen-participants had moderate to severe obstruction indicating their asthma was not well/poorly controlled. Preliminary outcomes revealed decreases in symptoms, asthma episodes, and beta agonist use, but ED visits or school absences were not affected (Figure 1). **Conclusions:** This program is feasible and we learned that one-to-one interaction with education and coaching with NS/RT yields improved participation by the teen participants. Barriers were encountered in recruitment and logistics of asthma education sessions. There was a trend towards improvement in asthma measures of asthma control. NS/RT students interacted positively with teens and with each other during the sessions and reported a real opportunity to collaborate. Phase II is being developed to streamline protocol based on effectiveness, engage parents more deliberately, field test the computing products, and improve communication among parents, school nurse, and team using Asthma Action Plans.

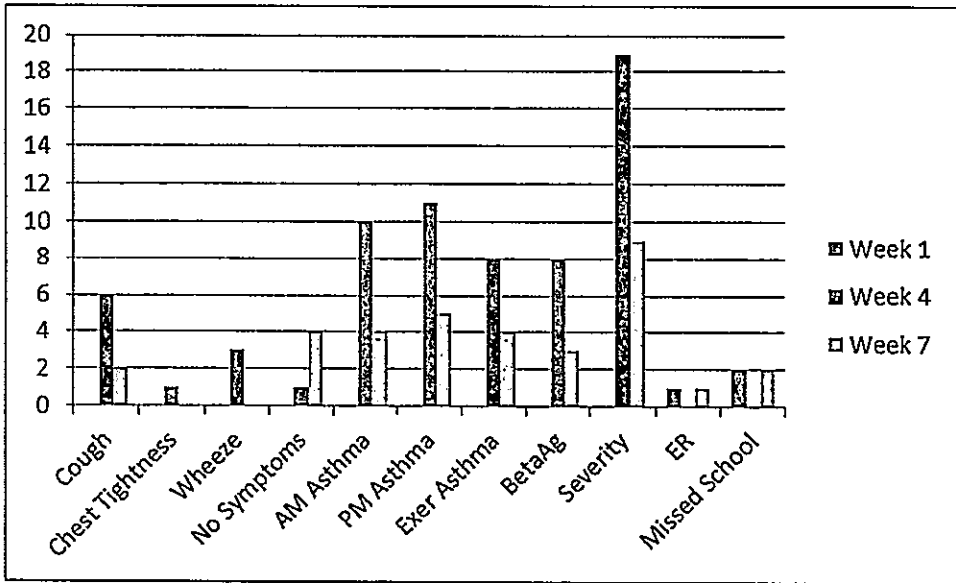


Figure 1. Asthma Symptoms/Status over Program

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Abstract Major Area (check one)

Asthma Diagnosis and/or Care

Asthma Education Program or Program Evaluation

Device and Technique Evaluation

Drug Clinical Trial

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