

STRONG CHILDREN'S RESEARCH CENTER

Summer 2012 Research Scholar

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ABSTRACT

Title: *Asthma Medication Adherence among Urban Teens: Barriers, Facilitators, and Experiences with School-Based Care*

Background: Adolescents face unique challenges in managing persistent asthma. Daily preventive medications are effective in controlling asthma symptoms, but many adolescents who could benefit from these therapies do not receive them, or do not take them as prescribed. A pilot study to improve medication adherence among urban adolescents with asthma showed some improvement in symptoms and an increase in motivation to take preventive medicines. A more comprehensive perspective is necessary to tailor future interventions to this population's specific needs.

Objective: To better understand urban adolescents' experiences with asthma management, pertaining to preventive medication adherence and participation in a school-based intervention.

Methods: Teens (age 12-15 years) with physician-diagnosed asthma and a current preventive medication prescription in Rochester, NY were eligible to participate in a pilot intervention, which included daily observed medication therapy at the school nurse's office and motivational interviewing by research team nurses. Semi-structured interviews were conducted as part of the final follow-up for this study. Qualitative content analysis of interviews was carried out, and data were coded by two investigators to identify themes.

Results: Themes were classified as either general asthma self-management or program-specific topics. In the general category, the importance of routines was foremost, and teens mentioned hurrying at both home and school as an impediment to taking medications. Consistent with existing literature, forgetfulness was the most commonly named reason for medication nonadherence. Adolescents also reported competing demands, related to school preparedness and social priorities, as barriers to medication use. Independence with medications, though not a reality for most of the teens, was a goal associated with several benefits. These ranged from avoiding nagging by parents and caregivers to feeling responsible and mature.

Experiences in the intervention program were varied, particularly with regard to the school nurse's role. Approximately half of the teens reported positive rapport or partnership with their school nurse, while a few felt that their nurse's attitude was dismissive. Unexpected benefits and barriers within the school structure became apparent, including positive and negative opinions about leaving the classroom, distances between classrooms and the nurse's office, necessity of hall passes to get to the nurse's office, and morning school routines making going to the nurse difficult. Importantly, many teens made a connection between daily use of their preventive medication and a decrease in asthma symptoms, providing incentive for them to continue adhering.

Conclusions: Adolescents with asthma stand to benefit from increased adherence to preventive medications, but encounter numerous barriers to proper use. Interventions to improve adherence must accommodate school demands and other adolescent priorities, many of which are unique to their age group. The implementation of routines and the school nurse's role as an ally may prove valuable in the transition to independence with medication.