

AB024. Barriers and facilitators to the real-world implementation of supervised asthma therapy in public schools: a qualitative study of school nurse perspectives

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Background: Randomized controlled trials have demonstrated that school-supervised delivery of inhaled corticosteroid therapy reduces asthma-related morbidity in school-aged children. However, successful evidenced-based interventions have not been incorporated into routine school practice. Asthma Link is a clinical program that provides school nurse-supervised inhaled corticosteroid therapy to high-risk children with asthma. This intervention is a real-world application of evidenced-based interventions of supervised asthma therapy. We examined the perspectives of school nurses involved in Asthma Link to determine barriers and facilitators to real-world program implementation in public schools in central Massachusetts.

Methods: Asthma Link included 38 schools and 108 school-aged children in central Massachusetts. Semi-structured interviews were conducted with school nurse participants in Asthma Link (n=16) based on five constructs: process, barriers, facilitators, satisfaction, and problem solving. Interviews were recorded, transcribed, and open-coded. Thematic analysis was used to identify major themes discussed in these interviews.

Results: School nurses identified the following facilitators to successful implementation of Asthma Link: (I) willingness to participate in the program (no school nurses

refused to implement the program); (II) appreciation of the opportunity to connect with the pediatric asthma provider, be a central member of the healthcare team, and supervise preventive medication delivery; and (II) self-identification as professionals to engage families and children in understanding the importance of preventive asthma care and daily medication adherence. Barriers to the implementation of this program were: (I) difficulty communicating with families and health care providers; (II) frustration with families not bringing the prescribed asthma medication into school; and (III) concern that some school nurses may not think it is their responsibility to administer daily preventive asthma medication. School nurses suggested that medical offices have a liaison tasked with working with school nurses and that an electronic system be developed to ease communication between parties. Overall, the surveyed school nurses found Asthma Link to be an acceptable program to incorporate into their everyday practice given the brief time needed, the ease in making it part of their morning medication distribution routine, and that this program creates a positive impact on children with asthma, including reduced asthma symptoms and rescue inhaler use and fewer school absences. They also agreed that Asthma Link helped children develop a medication routine, thus improving treatment adherence.

Conclusions: Despite evidence supporting supervised asthma therapy in schools, this modality is not widely adopted into routine practice. School nurses identified several key issues that can be addressed in intervention protocols to successfully implement the evidenced-based Asthma Link intervention in routine practice and have an important public health impact on pediatric asthma.

Keywords: Pediatric asthma; school based interventions

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