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School Nurse Perceptions of Child Asthma Management: Collaboration Through Research Supporting Community-Accessible Care

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Purpose: Asthma is recognized as a common condition with global burden affecting more than 300 million children and adults worldwide. School nurses are community-based frontline providers who support asthma management and promote optimal health in children and youth. The purpose of this study was to assess the perceptions of school nurses in Alabama, USA, on managing asthma in the school setting. This study was a collaboration among members of the Alabama Asthma Coalition (AAC), a state coalition in the USA with providers from clinical practice, academia, and advocacy organizations. School nurses represent a wide range of educational levels and years' experience and Alabama is a highly rural state with all counties having medically underserved areas. Thus, these school nurse perspectives may give insight to those from a broader global nurse provider population.

Healthcare professionals frequently attribute high morbidity, mortality, burden, costs, and challenges in the care of children with asthma to insufficient family care or selfmanagement (Akimbami, et al., 2016). Inadequate management of asthma results from poor adherence with healthcare provider recommendations and inaccuracy of symptom perception and severity recognition. School nurses are frontline healthcare providers who can have a global impact on prevention and control of this non-communicable disease (NCD). Multiple initiatives from global organizations provide guidance for community-based management approaches (GAN, 2019; GINA 2019; NHLBI, 2019; WHO, 2012). In Alabama, USA, asthma is the most common chronic condition in children and a leading cause of school absenteeism. Managing children with asthma in the school system is challenging for school nurses, yet few studies reported the perceptions of school nurses themselves. In this cross-sectional study, perceptions of Alabama school nurses on managing asthma in the school were explored. Methods: Four team members/authors of the AAC represented school nurses, academic nurse educators, primary care provider nurse practitioner, and researchers. Authors developed the 12-item survey that included both quantitative and qualitative (open-ended) questions. The IRB-approved survey was distributed to a statewide school nurse meeting with n = 173 respondents. Data were analyzed with descriptive

statistics (SPSS Version 26) and supported with participant comments.

Results: After review of the survey data, three themes were identified including nurses' role, barriers, and needs. Nurses reported routinely assessing students' asthma symptoms and patterns, students' and parent's knowledge, and environmental factors. They had access to some equipment but needed other resources. The greatest barrier to performing education was time available in the school day. School nurses identified needs for updated education, medication/equipment, and strategies for improving collaboration among other school personnel, providers, and parents. **Conclusion:** School nurses feel prepared to manage asthma but identify lack of certain resources and supportive policies, especially access to medications and time limitations as barriers to optimum care. Globally, school nurses are in a significant position to influence asthma self-management and optimize outcomes. Findings in this study reveal strategies for improving asthma care worldwide. Implications for advocacy at the policy level and broadening educational activities are supported by the survey results.

Title:

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Keywords:

asthma management, collaboration and school nurses

Abstract Summary:

The purpose of this study was to assess the perceptions of school nurses on managing asthma in the school setting. This study was a collaboration among a USA state coalition members from clinical practice, academia, and advocacy organizations. Implications for advocacy at the policy level with educational activities are supported.

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