Development and validation of an asthma knowledge test for children 8-10 years of age.

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Abstract

BACKGROUND:
Although there are many instruments available to measure asthma knowledge in adult populations, a search of the literature identified the lack of valid and reliable instruments to assess the asthma knowledge of pre-adolescent children. The aim of this study was to develop and validate an asthma knowledge test for children 8-10 years of age.

METHODS:
Three strategies were used to achieve the study objective: develop and design the asthma knowledge test; establish the content validity of test items; and conduct a pilot study to examine the validity, reliability and user friendliness of the instrument in a sample of 151 primary school children.

RESULTS:
A 24-item asthma knowledge test was developed based on selected items from the Newcastle Asthma Knowledge Questionnaire and supplemented with items from other instruments. Test items were worded to ensure they could be understood by 8- to 10-year-old children, and content validity confirmed by an expert panel. A pilot study demonstrated that the test was user friendly, generated responses that reflected varying degrees of item difficulty and produced scores on the test that discriminated between 'known groups'.

CONCLUSION:
Findings from this study indicate that an asthma knowledge test designed for primary school-age children has considerable promise. With further refinement and testing, this test will provide a valid and reliable measure of asthma knowledge in children with and without asthma that can be used in a wide range of childhood asthma studies.

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