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Editorial

Childhood asthma control: Implications of current strategies in sub-Saharan Africa

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Pediatric asthma is the most common non-communicable childhood disease with a high morbidity in the early years. In Africa, the prevalence of asthma is rising since the International Study of Asthma and Allergies in Childhood studies were done, with a peak in the burden of disease at age 10–14 years and in lower-middle-income countries like Kenya based on the global asthma studies and report.[1,2] Refiloe *et al*., in a recent editorial appearing in this journal, have highlighted the gaps in our setup in addressing asthma care.[3] In our article, we focus and highlight how to address such gaps in our newly launched national asthma guidelines.

Kenya recently launched its third edition of the national asthma guidelines that include changes in pediatric asthma management. This is expected to improve and standardize asthma care in the country.

Asthma is a chronic inflammatory disease; thus, we adopted the current global initiative on asthma guideline that advocates for inhaled corticosteroid (ICS) use in combination with a beta-agonist for over 5 years old during an exacerbation and not only a short acting beta-agonist as before.[4]

In our setup, the diagnosis of childhood asthma is largely clinical as lung function testing is not widely available and is difficult to execute in children.[5] History of recurrent or persistent cough, especially at night or during playtime or with exertion, which is the most common presentation, should be sought.

Other significant symptoms include wheezing, chest tightness, and difficulty in breathing. In the children younger than 5 years, other asthma mimics may exist. Viral infections, anatomical airway defects, and reflux disease may cause recurrent cough and wheezing. Therefore, in our national guidelines, we have recommended that children below 2 years should be evaluated by a respiratory pediatrician where feasible.[5]

Clinical diagnosis has its limitation, and patient and caregiver literacy may interfere with understanding the condition and its management.[5] Furthermore, the inability to prove the illness to the individuals, parents, or guardians brings with it doubt as opposed to diseases such as malaria and HIV that can easily be tested to give a positive result. Variation in intensity and time of symptoms plus the life course of asthma further complicates the condition as children are at times likely to be asymptomatic with the parents/caretakers believing that they are cured only for recurrence to occur subsequently.

As the advocacy to improve diagnosis by testing using such methods as lung function and provocation tests continues, we note that these can aid diagnosis but could be normal especially between flare-ups. We recommend that lung function testing can be done after recovery from an acute exacerbation and to be attempted in all children above 5 years of age where possible.[6] Chest X-ray is rarely indicated but useful when other diagnosis is being considered like in severe cases, a foreign body, tuberculosis, or airway congenital abnormality.

Our guideline gives an option of "trial of therapy" using either ICSs for at least a month with a symptom diary or a short course of oral corticosteroids and reviewing for symptom improvement.[5] This is for centers mainly at primary and secondary care level where lung function tests, chest clinics, or specialists are unavailable. It is worth noting, the diagnostic capacity of asthma has further been reduced by the COVID-19 pandemic, especially because of the initial disruption of care with its indirect effects to children.[7]

Once a diagnosis of asthma has been established, the goal of care should be to control symptoms and reduce future risks of exacerbations with the aim of optimizing lung function. In an environment where only one-third accepts a diagnosis of asthma,[8] this goal cannot be achieved without substantive health education.

Health education should focus on demonstration of the correct use of inhalers, emphasize adherence to ICS and other controller medications, how to reduce medication side effects and ways to reduce stigma and discrimination associated with asthma. In demonstrating correct use of inhalers, younger children below 12 years or those with special needs should use them with spacers. The focus of health education should not only be to those who take care of children at home but also to the school nurses and teachers whom children spent most of their time with.

Strategies that work to reduce discrimination and stigma should be determined as well as evaluation of what really drives stigma in different regions of Africa as it is culturally and ethnically diverse. Children who can express themselves, rather than only perceiving them by their chronological age, should be empowered to have symptom free lives.[9] Empowering these children and young adults require that we listen to them and be less judgmental even when faced with patients who are non-adherent to medications. This will enable us to ensure proper childhood asthma control in our setup.

Finally, the provision of guidelines is a tool that will not only reduce the gap in asthma care but will also advocate for local availability of appropriate inhalers and spacer devices plus their inclusion in the national medication formulary.

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