

Asthma education for children and their families can improve outcomes. This includes making the time to:

- Help the caregiver understand any uncertainty around diagnosis
- Address concerns of the child and carer
- Assess the impact of asthma on day to day activities
- Help carers understand the role of each treatment and how they work
- Explore practical solutions to improve adherence
- Explain what to do when symptoms worsen

Help caregivers/whānau understand any uncertainty around diagnosis

Confirming a diagnosis of asthma in children, particularly in younger children, is difficult even for the most experienced health professional and can often create uncertainty for the family. It is important to be honest about the diagnosis if there is uncertainty. If the diagnosis suggests that this child is a "wheezy infant" call it that.

These difficulties may be interpreted by families as inaccuracies, creating a sense of unease. The result can be quite profound with many parents not 'believing' the diagnosis or that a diagnosis cannot be made with certainty and thus do not engage in the education session or treatment protocols. This may lead to anxiety in the parents and reluctance to give treatments.

Address the concerns of the child and carer

It is important to establish what the concerns of the child and carers are and to address these. This sounds like common sense but is often missed as health professionals tackle what they see as the problems. Often the problems are linked and a common theme can be sourced and so begins the foundation to work together. A good question to ask parents or an older child is "what is worrying you most?"

Assess the impact of asthma on day to day activities

Key questions to ask include

- What triggers cough and wheeze, what time of the day does it occur?
- Have there been any acute attacks? How severe was the worst attack?
- Have you had to seek emergency or after hours medical care?
- How does the asthma affect the child's life? Does it limit activities? Have they missed any school?
- How often has the child had to use reliever treatment? How effective was it?

Help carers understand the role of each treatment and how they work

Written asthma management plan are particularly useful in helping children and carers understand the role of each treatment. A good example of this is in explaining the value in continuing inhaled corticosteroid for long periods of time not short bursts.

Explore practical solutions to improve adherence

There are a number of practical solutions that may help children and carers adhere to medication regimens, these may include:

- Keeping the inhaler in sight so it's not forgotten, aligning it with an activity done every day like cleaning teeth, setting the cell phone on alarm (great for older children) or addressing roles and responsibilities in the family. Surprisingly many parents have a very unrealistic expectation of young children to self administer their medications independently.
- If the child is moving between two homes on a regular basis then perhaps two sets of medication may be more realistic. Education to both parents/ grandparents or other family members may be necessary.
- The parents approach should be firm but kind there are no choices, the medication will be given. The child may have a choice "before your story or after" - "when" not "if". Having a treat like a story or sticker afterwards may help but lengthy discussions or negotiations usually do not. Reassure and encourage the parents in this approach while acknowledging the difficulties.
- Inhaled therapy should be introduced to a child in an age appropriate way - for example demonstrate how to use an inhaler and a spacer on a toy to a young child. Show them an appropriate hold to ease delivery and demonstrate constant praise to both the child receiving the inhaler and the parent giving it.

Many parents are fearful of the word "steroid" they need to be convinced that this is going to do their child greater good than harm.

Asthma education of the child and the family should lead to an understanding of good control of asthma and the role of medications in achieving this

Adherence/Compliance with prescribed treatment

The main reasons for poor adherence would most likely fall into five categories:

- Parents do not understand the treatment which leads to confusion
- Parents are uncertain of the diagnosis (see above)
- Parents fear the medication (steroid)
- Parents may be disorganised or busy or maybe it is just not a priority in their busy often chaotic lives
- Parents experience difficulty in administration of treatments (address below)

To tackle these issues the key is to find the source of the problem and then work together to find solutions. These can be:

- Addressing the concerns around the medication
- Helping parents understand the role of each treatment and how they work.

It takes time

In older children it is important to establish why they don't take their medication. Are they embarrassed? Do they believe they don't have a problem? Are they disorganised? Or maybe even they can't be bothered. Educators need to negotiate what support these children require to acknowledge the difficulties of what we are asking them

to do. Educators need to work beside them not at them to find solutions, to find out what is important to them such as sports and encourage and reward achievements. The carer's role here may be to remind but not to nag.

When to call for emergency help

This is one of the most stressful times for parents of a child with asthma – when to call for help if things go wrong and a fear of missing something important.

- Acknowledge the experiences they have had
- Discuss the calls they have made and congratulate them on doing it to build a parent's confidence
- Introduce self-management plans to assist in when to get assistance and symptom diaries to help guide management. Plans need to be relevant to the child and experience of the family, clearly written and understood. Plans will not be effective if the parent doesn't accept the diagnosis
- Discuss the plan and encourage questions
- Review at each visit

In Summary

Asthma education of the child and the family should lead to an understanding of good control of asthma and the role of medications in achieving this, including how to use inhaler devices and what to do in the case of an exacerbation.



Acknowledgements

Dr Cass Byrnes, Paediatric Respiratory Specialist, Starship Children's Hospital - (from a talk presented at the Respiratory Educators' Conference 2008)

Carol Fitzgerald, Respiratory Clinical Nurse Specialist, Otago District Health Board

References

Paediatrics at a glance - The respiratory examination. 2nd edition. Miall, Rudolph & Levene, 2007.

Tu Kotahi Māori Asthma Trust

Tu Kotahi Māori Asthma Society was established due to a need to reduce the barriers for Māori in receiving quality asthma care.

As well as providing education in homes or in other setting where whānau feel comfortable, the service enables other social and health issues that may be impacting on a child's asthma to be addressed.

Tu Kotahi Māori Asthma Society suggests that housing, heating, budgeting, transport and the cost of healthcare and prescriptions are some of the complex factors that should be factored into an overall asthma management plan. They recommend the following when developing an asthma management plan:

- Consider a simple pictorial management plan including pictures of inhalers and spacers. This simplifies the instructions for giving medications and can be followed by anyone in the whanau involved in the care of the child.
- Personalise the plan, including the child's name. This can be provided to all caregivers, and the school.
- Demonstrate how to use the medication with a spacer and provide simple information that reinforces both technique and maintenance of the medication and spacer
- Consider using a doll or teddy bear as a teaching aide when demonstrating how to use a spacer to younger children and whānau. Spacers are less likely to be used if the learning experience is traumatic.

Asthma Education Desktop Prompt

The following desktop prompt has been used extensively by GPs, practice nurses and asthma educators in Wellington and surrounding areas. Adapted from an original document provided by Barbara Scott of WIPA

- 1. Four questions to assess asthma control:
 - a. When did you last use your blue reliever inhaler more than three times a week?
 - b. Do you wake wheezing at night?
 - c. Has your activity level changed because of your breathing?
 - d. Where do you keep your reliever inhaler?
- 2. When was the child's last episode of asthma education?
- 3. Does the child understand:
 - a. Their asthma?
 - b. Where their asthma medication works, i.e., relievers relax the airway muscle, preventers work on the inflammation and swelling inside the airways. (What tools have you got to describe this to your patients?)
 - c. The importance of using their medication appropriately?
 - d. When their asthma is deteriorating?
- 4. Assess reliever use, i.e., type, technique,* frequency.
- 5. Assess preventer use.*
- 6. Assess symptom controller use (symptom controller is the term applied to long acting beta-2 agonists or LABA).*
- 7. Does the child have an asthma management plan?
 - a. Is it current?
 - b. Do they follow it?
- 8. Ensure the child or cargiver is given appropriate written information and a follow-up appointment.
- 9. Refer for comprehensive asthma education.

^{*}Ask the child or caregiver to show you how they use the device