Practical Asthma Education for Families
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Today’s Presenters

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CME Accreditation

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The George Washington University School of Medicine and Health Sciences designates this continuing medical education activity for a maximum of 30 AMA Physician Recognition Award Category 1 Credits™.

Participants will be required to certify attendance or participation on an hour-for-hour basis.

Objectives

At the end of this session, participants will be able to:

1) Identify at least one principle of effective patient education and how it translates to practice.

2) Demonstrate optimal technique for using a metered-dose inhaler (with two kinds of spacers - mouthpiece and mask) and a dry-powder inhaler.

3) Describe three recommendations for reducing common environmental exposures for a child with asthma.

4) Describe how to use an Asthma Action Plan as a patient education tool.
### Practical Patient Education

*Top 5 Tips*

1. Partner with families and set shared goals
2. Teach proper use of meds and devices
3. Tailor environmental education
4. Encourage use of Asthma Action Plan and regular follow up
5. Review key messages at each visit

### IMPACT DC Model
Practical Patient Education

Top 5 Tips

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Patient Education Principles

Meet the patient and family where they are...

In spirit:
- Shared agenda and goal setting
- Patient-driven change
- Patient is the expert
- Collaboration instead of confrontation

In action:
- Express empathy
- Use reflective listening and open-ended questions
- Build a menu of choices
- Support self-efficacy
- Use teach-back method
Quick and Dirty Patient Education Strategies

Identify values:
- “What’s the worst thing about your child’s asthma?”
- “What’s the most important thing we can address today?”

Discuss asthma-related beliefs:
- “How do you feel about Jose’s asthma medicines?”
- “Can you tell me what you think helps or hurts Jose’s asthma?”

Explore perceived barriers to good asthma control…you might be surprised.

Self-efficacy… find it and build on it!
- Set manageable shared goals… one success will lead to another.

Patient Education Principles: Do they work?

- Greater child and/or parent self-efficacy → better child health status and fewer asthma symptoms\(^1\)
- Parents’ positive beliefs about asthma management behaviors (i.e. how helpful they can be) lead to → fewer days of wheezing and better health status for kids with asthma\(^2\)
- Better asthma management strategies – including a more collaborative relationship with physicians → decreased pediatric asthma morbidity\(^3\)

Health Literacy and Asthma

• The capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions (CDC)

• Demonstrated links between health literacy and:
  • Parental worry and perceived burden from child’s asthma
  • Perceived parental self-efficacy around managing child’s asthma
  • Racial and ethnic disparities in asthma


Health Literacy and Asthma

• Research suggests that one-on-one education with an asthma educator can result in fewer ED visits and admissions, and improved self-management.1

• Use of video or written asthma education materials increases parental knowledge.2

Practical Patient Education

Top 5 Tips

1. Partner with families and set shared goals
2. **Teach proper use of meds and devices**
3. Tailor environmental education
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Device Training

- Why it matters
- Who can do it
- Choosing a device
- Proper techniques
Device Selection

- MDI with spacer
- Nebulizer
- DPI – Diskus, Twisthaler, Flexhaler

MDI + spacer beats nebulizer for kids < 5 years
- Systematic review & meta-analysis of RCTs
- Acute exacerbations in ED
- MDI use decreased admissions and improved clinical score
- Effect more pronounced for mod-severe exacerbations

Metered Dose Inhalers (MDIs)

Introducing the MDI to patients

- Name of medicine
- Expiration
- Counter

www.aanma.org → AANMA Store → Posters
Proper MDI Technique

Handouts
Don’t forget about *shaking* and *priming*!

- HFA inhalers clog easily
- Evaporation and separation of propellant may reduce dose up to 35%
- MDIs have specific priming recommendations
  - Ventolin & Proventil: 4 sprays before first use and if not used for 2 wks
  - ProAir: 3 sprays before first use and if not used for 2 wks
  - Xopenex: 3 sprays before first use and if not used for 3 days

See **Priming and Care Guide** on QI Team Space for details

**Key Points MDI Technique**

**With mask spacer**
- Stand or sit up
- Shake x 5 secs
- *Prime* if needed
- Tight seal with mask
- 1 spray at a time
- 5-6 normal breaths
- Wait a minute before next spray

**With mouthpiece spacer**
- Stand up
- Shake x 5 secs
- *Prime* if needed
- Breathe out fully
- Tight seal on mouthpiece
- 1 spray at a time
- Long slow breath in
- Hold x 10 seconds
- Wait a minute before next spray
MDI Cleaning and Storage

- Clogged ports – wet cotton swab
- Avoid extreme temperatures

Valved Holding Chambers (VHC) - Spacers

How to choose

- Mask should cover mouth and nose
- Mouthpiece ~ age 8
MDI with & without spacer