

# **Development and Communication in the Management of Pediatric Asthma**

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I have no financial relationship with the group. I  
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# Objectives

- Identify developmental implications for:
  - understanding chronic conditions
  - self-management of chronic conditions
- Explore the importance of language in
  - provider-patient/ family communication
  - self-management
  - understanding chronic conditions

- “Knowing the developmental and psychosocial significance of illness for children and parents can improve the quality of care you provide”

**DEVELOPMENTAL IMPLICATIONS  
FOR ASTHMA UNDERSTANDING  
AND MANAGEMENT**

# Quick Review of Piaget

- Sensorimotor Period (ages 0-2)
- Preoperational Period (ages 2-7)
- Concrete Operational Period (ages 7-11)
- Formal Operational Period (ages 11+)

# Sensorimotor (ages 0-2 years)

Young child is working to integrate and organize motor movements with sensory input from the environment, resulting in *intentional goal-directed behavior*

- Characterized by motor and sensory exploration

# Preoperational (ages 2-7 years)

Development of permanence and conservation leads to the generation of an *internal cognitive structure*

- Characterized by concrete thinking, centering, egocentrism, poor generalizability, irreversibility

# Concrete Operational (7-11 years)

Decentering and reversibility develop along with achievement of conservation, leading to the *ability for logical thinking*

- Characterized by an understanding of time, future and past, and rules

# Formal Operational (12 + years)

Thinking reflects logical causality with the ability for both inductive and deductive reasoning, *leading to the understanding of hypothetical and abstract events*

- Characterized by understanding of independence in thinking, reasoning that is at times faulty, and rich experiences in thinking

# Developmental Implications for Sensorimotor Patients

## **Understanding**

- No real understanding of illness concept
- Do understand what affects them directly
- Strong desire for independence but poor emotional regulation
- Do not appreciate the logic of explanations

## **Self-Management**

- Not capable of any self-care
- Often resistant to care demands based on sensory experience (tastes, feels, smells bad)

# Developmental Implications for Pre-Operational Patients

## **Early**

### **Understanding**

- Illness is a sensory experience (feels bad)
- Cause is often magical and illogical, can't explain cause
- Can appreciate if... then as long as it is concrete

### **Self-Management**

- Can be trained in concrete skills
- Require a lot of support in care as no capacity for independent decision making

# Developmental Implications for Pre-Operational Patients

## Late

### Understanding

- Cause temporally co-occurs with onset
- Concrete actions associated with symptoms
- Preoccupied with their own experience
- Only 6% of 7-9 year olds have an accurate understanding of their illnesses

### Self-Management

- Tend to focus on part of experience rather than whole
- Can begin to generalize mnemonics to actual practice

# Developmental Implications for Concrete Operational Patients

## **Understanding**

- Begin to see causes in terms of body processes
- Understand reversibility of illness and healing
- Beginning to understand prevention
- Can differentiate self from others

## **Self-Management**

- Respond well to educational interventions
- Tend to improve compliance when it makes sense to them
- Improve self-care efforts

# Developmental Implications for Formal Operational Patients

## Understanding

- See illness in terms of internal organs and functions
- Understand own actions can influence disease process
- Understand physical and psychological parts of self

# **SPECIAL ADOLESCENT SELF- MANAGEMENT CONSIDERATIONS**

# Specific Implications for Adolescent Self-Management

## **Abstract Thinking**

- Able to understand "shades of gray" in situations
- Begin to consider multiple outcomes of actions
- What you prescribe is not always what they decide
  - Common for teens to be in denial about having asthma or stop taking medications

## **Executive Functioning (Connecting past to present actions)**

- Inhibit inappropriate behavioral/emotional responses (more quiet resistance when they disagree with regimen)
- Draw conclusions from available information
  - May stop taking daily controller medications and rely only upon rescue medications, because the benefits of controllers might go unnoticed
  - Helping them get more information is always better (The peak flow meter can detect subtle airway inflammation and obstruction, even when someone feels fine)

# Specific Implications for Adolescent Self-Management

## Reasoning and Problem Solving

- Early on, adolescent's newfound ability to think in hypothetical ways produce unconstrained thoughts with unlimited possibilities.
  - Make it up as they go along, try novel ways of solving asthma problems
- As they develop more frontal lobe control, adolescents begin to balance their reasoning with the realities of life experience and draw/commit to realistic conclusions or solutions to problems.

## Identity Formation

- Develop a desire for independence in all aspects of care
  - Resist parent attempts at involvement or control
  - Older kids should be actively included in all discussions and treatment choices because ultimately they're the ones who have to take the medication regularly and deal with possible side effects.
- Feel inherently insecure about themselves and become highly dependent upon the peer group in decision-making
  - If peers do it a different way, they may too

# Notable Research Conclusions

- Most data suggest that children's concepts of illness evolve in a systematic and predictable sequence consistent with Piaget's theory of cognitive development
- Children put information they gather into the context of their understanding of the world around them, which is influenced by their level of cognitive development.
- Most kids can achieve at least a concrete understanding of their illness and its management
- Mixed evidence on the importance of experience to understanding (only increases ability to describe)

# Notable Research Conclusions

- Results indicate that children's concepts of illness can influence their own self-management illness; that it is important to know the cognitive-developmental level of a target population when considering an intervention
- Experience does improve skill development, regardless of developmental level
- Asthma self-management programs have been shown to increase children's knowledge about asthma and improve their management practices and health status as young as 4 years.
- Children as young as 2-3 years have been noted to have better compliance and health when they are provided with developmentally appropriate education resources.
- In pediatric patients, developmental age needs to be a consideration in choices regarding regimen, action plan, medication, and even inhaler device used.

What you say is not as important as how you say it

## **THE IMPORTANCE OF LANGUAGE IN UNDERSTANDING OF ILLNESS**



Sometimes Language is Not Spoken

# Therapeutic Language

- Language is more powerful than most people realize
- Remember the power of your words
- Language is critical to partnering in care
- Language can change a reaction to a situation by changing perception
- Children are especially susceptible to how you say things

# Use Language Wisely: Frame the Positive

- Stay away from words like “don’t, can’t, won’t”
- Use your voice as a “highlighter” to emphasize a positive image of possibilities
  - **What they can do** vs. what they can’t do
  - **What they have** vs. what they don’t have
  - **Survival skills** vs. prior troubles
  - **Success** vs. failure

# Use Language Wisely: Create Expectations

- Think about the message, then fit your language to your message
- Use statements rather than questions to gather information
  - “I wonder how..., instead of why? or what?”
- Your statements are indirect suggestions that create expectations for families
  - “Won’t it be great when...”
- Create expectation of choice
  - “You may find it’s easier to.. OR you might prefer...”

# Use Language Wisely: Reducing threat

- Children react to words that create negative images (IV or straw)
- Hard and soft words change perceived threat  
(Hurt or sore; burn or very warm; pain or discomfort)
- Soothing adjectives soften words  
“I need to stick this needle in your vein” or “I am going to gently place this tiny needle in just the place it needs to go”

# Use Language Wisely: Useful Words

- BECAUSE
  - Children often need a reason to do what you have offered
- OR
  - Children desire choices and it increases their commitment
- YET
  - Implies that something is to come

# **USING COMMUNICATION TO OPTIMIZE CARE**

# Nurture the Practitioner-Patient Relationship

- **Send a clear message of flexibility**
- **Open and unrestricted communication**
- **Be willing to negotiate treatment goals**
- **Make treatment decisions jointly**
- **Emphasize importance of honesty**
- **Help kids identify problems they anticipate**

# Use behavior management strategies

- **Tailor regimen for success and increase goals gradually**
- **Increase follow-up frequency until family has mastered a regimen**
- **Provide feedback on self-management**
- **Target families for formal interventions**

# Tailor your **Message** at each visit

- **Focus on strengths and accomplishments**
- **Provide consistency**
- **Guide decision-making**
- **Let patients know you are monitoring their behaviors and progress**

# Tailor your **Tasks** at each visit

- **Practice needed skills with families**
- **Teach parents to provide natural and logical consequences**
- **Reinforce key educational messages**
- **Remind families of support services available**

# Maintain a Developmental Approach

- Effective treatment fits the pattern of child and family life
- Effective education is understood by the child and family
- Effective management takes advantage of development, communication, and relationship

Thank you for your time

Questions?

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