

Care-Seeking for Non-Urgent Pediatric Conditions in the ED and Primary Care Clinic: The Role of Parent Health Literacy

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Non-Urgent ED Use

Use of Emergency Department (ED) for conditions that do not need immediate treatment

- Could be seen in the next 24-48 hours
- Up to 2/3 of ED visits
- Strains ED resources, higher cost

Non-Urgent ED Use and Health Literacy

Low parent health literacy

- Common in the ED
 - 55% of parents in ED with their child
- Risk factor for non-urgent ED use

No previous understanding of **why** parents with low health literacy are seeking non-urgent ED care

Study Aim

Aim: Explore differences in seeking care and decision-making regarding location of care of parents with low and adequate health literacy.

Methods

- Two locations
 - Emergency Department - Emergency Severity Index (ESI) level 5 patients
 - Demographically similar community health clinic
- Office hours (Weekdays 9am-5pm)
- Preselected periods of enrollment (4-8 hours)
- Consecutive sample of parents

Methods-Study Population

- Inclusion criteria:
 - English speaking
 - Parent or legal guardian ≥ 18 years
 - Child ≤ 8 years
- Exclusion criteria:
 - Acute distress or active interventions
 - Non-accidental trauma

Measures

- Self-administered demographic survey
- Measured health literacy and numeracy
 - Newest Vital Sign
 - Validated measure of print literacy and numeracy
 - Low (0-3 correct) or adequate (4-6 correct) health literacy

Nutrition Facts

Serving Size $\frac{1}{2}$ cup

Servings per container 4

Amount per serving

Calories 250 Fat Cal 120

%DV

Total Fat 13g 20%

Sat Fat 9g 40%

Cholesterol 28mg 12%

Sodium 55mg 2%

Total Carbohydrate 30g 12%

Dietary Fiber 2g

Sugars 23g

Protein 4g 8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

Methods

Individual in-depth interviews

- Interviewer blinded to health literacy status
- Conducted in examination rooms
- Semi-structured interview guide
 - Reasons for seeking care for current illness
 - Using the clinic for acute illness
 - Using the ED for acute illness

Methods

Qualitative analysis

- Coded by a primary reviewer with a second reviewer independently coding
- Grounded theory
 - Incorporated themes supported by parents in the ED and clinic
- Nvivo version 10.0
 - Integrated demographics, health literacy score, and interviews

Results

- 50 interviews – 30 ED parents and 20 clinic parents

	Low health literacy n=28 (56%) n(%)	Adequate health literacy n=22 (44%) n(%)		Low health literacy n=28 (56%) n(%)	Adequate health literacy n=22 (44%) n(%)
Parent			Child		
Age			Age		
18-25	9 (33)	9 (41)	< 1 year	9 (32)	8 (36)
25-34	12 (45)	7 (32)	1-2 years	4 (14)	3 (14)
> 35	6 (22)	6 (27)	>2 years	15 (54)	11 (50)
Female gender	26 (93)	18 (82)	First born	12 (43)	9 (41)
Ethnicity/race			Insurance		
White	3 (11)	6 (27)	Private	2 (7)	3 (14)
Black	18 (64)	11 (50)	Public or none	26 (93)	19 (86)
Other	7 (25)	5 (23)	Chronic illness*	15 (54)	8 (36)
Education					
Some HS or graduated	19 (68)	11 (50)			
1-4 years college	9 (32)	11 (50)			
Household income					
< \$20,999	18 (67)	10 (50)			
> \$21,000	9 (33)	10 (50)			

*Children with Special Health Care Needs Screen for chronic illness

Parents With Low Health Literacy

Seeking Answers

- Seek care for a provider to diagnose and recommend treatments
 - Few disease assessment skills
 - Do not begin active treatment
 - Difficulty making health decisions

"I just wanted to see what was going on."

"I wanted to see what was wrong with him."

"My first thought is to bring them to the hospital. Just in case something is wrong and I don't wait so long and it ends up being something."

"It is a very hard decision to know what to do."

Parents With Adequate Health Literacy

Seeking Reassurance

- Seek care for a provider to reassure
 - Assess illness and determine treatment
 - Diagnose, treat, and problem-solve illness at home
- May also have specific needs
 - Believe child needs something (e.g. antibiotics, referral, xrays, etc)

"I just assumed it was the stomach flu from her symptoms, but I just needed to be sure."

"I wanted to verify."

"I just wanted to make sure that...it wasn't something going around that might be worse than the normal virus."

"We wanted to double check that we're doing the right thing."

Parents With Low Health Literacy

Overestimate Illness Severity

- **All** of the parents in the ED identify their child's illness as severe and needs immediate assessment

"I would wake up and...he'll just be gone or something."

"Cause I know if he fall asleep he might not wake up."

Prompt Care

- If a parent decides a child needs to be seen, it needs to happen quickly
 - Come to the ED in non-clinic hours or seeking care in the clinic if an appointment is available within hours

"I usually take them right away – when I see something is not right."

"My first thought is to bring them to the hospital."

"...If it's a scratch, pinch, bite, we're going to the doctor or the emergency room...I take them somewhere ASAP."

Parents With Adequate Health Literacy

Understand Illness Severity

- **No** parents in the ED overestimated the severity of illness

"I assess the situation. I see how bad their illness is. Is their headache doable, or is it a migraine."

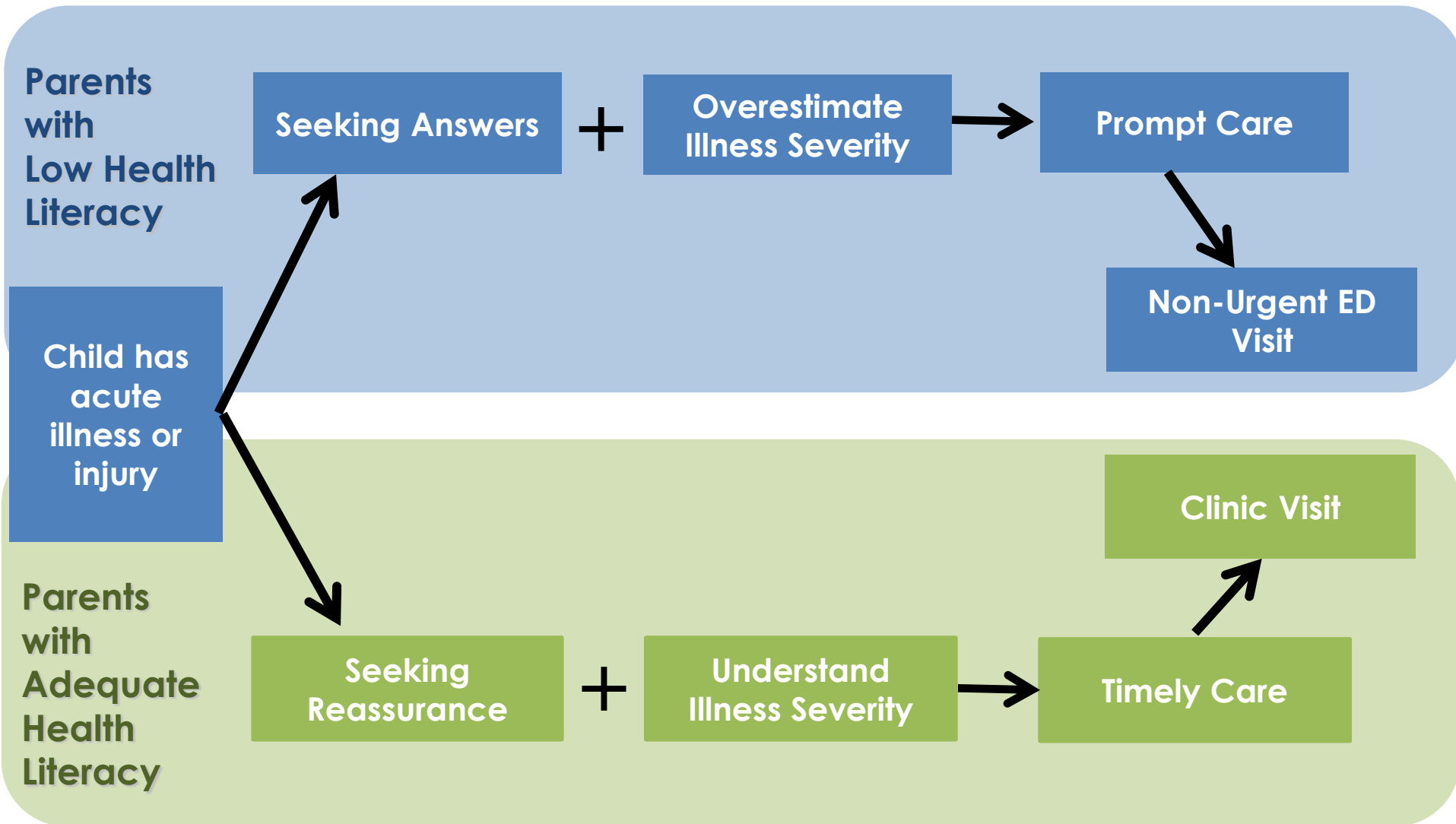
"There's no point of going to the Emergency Room and waiting four hours when I can get seen right away [in clinic]."

Timely Care

- Prefer a quick visit
 - Unwilling to wait in the ED if they can be seen in the child's clinic within a few days

"[In the ER] you really have to be sick for real. And this wasn't a cause to go... They have a room for major and for minor, and when you're sitting in minor, with her symptoms it would've been minor, we would've been there all night."

Conclusions



Conclusions

Differences highlight potential areas for intervention

- Health literacy-related caregiving skills are important reasons for seeking care in the ED
 - Illness assessment
 - Illness treatment
 - Understanding illness severity
 - Navigating the healthcare system
- Improving caregiving skills has the potential to reduce non-urgent ED visits

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Brief Interview Guide

Tell me about what brought you to the ER/clinic with your child today.

Tell me about how you took care of your child before you came to the Clinic/Emergency Room.

How did you decide to bring your child to the Clinic/Emergency Room?

What kind of treatment did you think (child's name) needed for his or her sickness or injury?

After you decided (child's name) should see a doctor, how long did you wait to schedule an appointment/come to the ER?

What was the main thing you were hoping for when you decided to come to the clinic/Emergency Room?

Can you tell me in general, what do you do when your children are sick or hurt?

Tell me about what it is like to make decisions about how to care for your child/children when he/she/they is/are sick or hurt.

Tell me about how you decide where to take (child's name) for care when he/she is sick or hurt.

Tell me about how you decide when your child needs to be seen quickly or can wait 24 or 48 hours.

How do you make this decision to take your child to the clinic or ER?

Parent Provided Chief Complaint

Illness	n (%)
Rash	11 (22)
Fever	8 (16)
Other ^b	8 (16)
Cough	7 (14)
Vomiting	6 (12)
Diarrhea	4 (8)
Upper Respiratory Infection	4 (8)
Blisters or Burns	3 (6)
Ear Pain	3 (6)
Congestion	2 (4)

^b Includes: Pink eye, allergies, pain, laceration, suture removal, shoulder injury, and constipation

Special Circumstances

- Parents with adequate and low health literacy seek care in the ED due to overestimating severity
 - First-born child
 - Specific symptoms (fever and vomiting)