



**Pediatric Health Network** 

Children's National.

# Chronic Pain Management during the COVID-19 Pandemic

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**FUTURE OF PEDIATRICS** 

### Disclosures

• No financial disclosures.



## Objectives

- Review the mental health impact from the COVID-19 pandemic
- Identify stressors impacting pain across age groups
- Recognize the spectrum of services offered in the chronic pain clinic
- Identify steps in management prior to pain clinic referral
- Identify parental resources for chronic pain
- Describe expectations of resuming care for a patient who had chronic pain
- Describe return to school steps
- List strategies for pediatricians

## COVID-19 Mental Health Impact on Youth

Tidal wave of mental health difficulties



- Seasonal challenges:
  - Prolonged restrictions, fear of easing restrictions
  - Missing events
  - Vaccines

### **Clinical Observations: Deterioration**

- Increased Depression
- Increased Anxiety
- Attention Problems
- Virtual School



Decreased Protective Factors



## Clinical Observations: Escalation in Severity

- Severe Psychiatric Symptoms
  - Worsening of prior anxiety/depression (YoungMinds, 2020)
  - More severe symptoms

- Suicidality & NSSI
  - More severe self-harm attempts
- Dissociations

Hallucinations





### **Compromised Behavioral Health**

- Barriers to healthy lifestyles
  - Access to healthy foods
  - Sleep hygiene
  - Limited Physical Activity
  - Increased screen time
  - Health inequities widening







### Pandemic Stress:



### KIDS:

- Attention Problems
  - High demand of virtual school
  - Compounded by screen time
- Irritability
  - Poor emotion regulation
  - Anger
- Anxiety
  - Increased worries/anxiety
  - Poor sleep
  - Behavioral regressions
- Loneliness
  - Missing friends & family

### **ADOLESCENTS:**

- Peer Precaution Variability
  - Increased negotiations and conflict
  - Limited numbers leads to more "leaving out"
- Social Isolation
  - Contributes to depressed mood
- Missing Milestone Events
- Virtual School Platforms

### **COLLEGE**

- Altered Campus Life
  - COVID fears and restrictions
  - Social isolation
  - Conflict with physical distancing
  - "All the work, none of the fun"
- Living at home
- Virtual Classes
- Balancing Emotional Demands
  - Safety, Health, Anxiety
  - Connection
  - Normalcy, Fun

## Pediatric Pain Screening Tool

#### PPST items

### Physical Subscale

My pain is in more than one body part.

I can only walk a short distance because of my pain.

It is difficult for me to be at school all day.

It is difficult for me to fall asleep and stay asleep at night.

### Psychosocial Subscale

It's not really safe for me to be physically active.

I worry about my pain a lot.

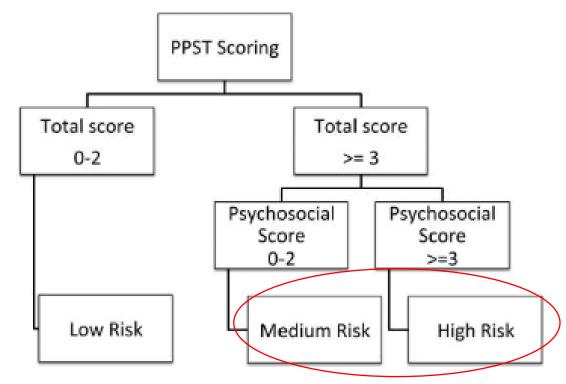
I feel that my pain is terrible and it's never going to get any better.

In general, I don't have as much fun as I used to.

Overall, how much has pain been a problem in the last 2 weeks?\*

### 9 questions

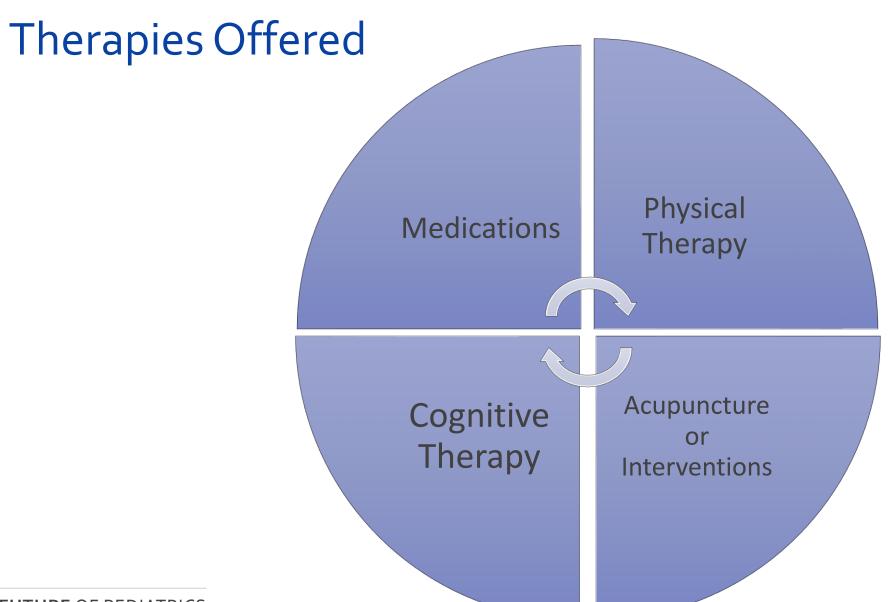
High sensitivity and specificity for disability & emotional distress



<sup>\*&</sup>quot;not at all", "a little", "some", "a lot", and "a whole lot."

## Conditions we treat

- Chronic headache, not responding to medications
- Persistent post-surgical pain
- Back pain
- Pain associated with orthopedic and sports injuries
- Nerve-related pain and injuries
- Widespread musculoskeletal pain
- Complex Regional Pain Syndrome
- Hypermobility syndrome including Ehlers Danlos
- Dysautonomia
- POTS (Postural Orthostatic Tachycardic Syndrome)
- Abdominal pain
- Pain associated with chronic illness such as sickle cell disease and juvenile arthritis
- Children with physical dependence on pain medications needing to be weaned
- Patients who demonstrate functional disability due to pain



### Before Pain Clinic

- Diagnostic Testing
  - None Required
  - Request diagnostic testing already completed
- Joint and MSK Pain
  - Red flags:
- Abdominal Pain
  - Red flags:

### **Alarm Findings in Children with Recurrent Abdominal Pain**

Chronic, severe, or nocturnal diarrhea Genitourinary tract symptoms

Deceleration of linear growth Involuntary weight loss

Delayed puberty Pain that wakes the child from

Delayed puberty Pain that wakes the child from sleep
Dysphagia Persistent right upper or lower quad-

Family history of inflammatory bowel, celiac, or peptic ulcer disease rant pain
Significant vomiting

Gastrointestinal blood loss Unexplained fever

Reust CE, Williams A. Recurrent Abdominal Pain in Children. Am Fam Physician. 2018 Jun 15;97(12):785-793.

### CHARACTERISTICS OF SERIOUS CONDITIONS

Pain relieved by activity and present at rest

Pain or stiffness in the morning

Nocturnal pain not relieved by simple analgesics

Objective joint swelling

Stiff joints

Bony tenderness

Muscle weakness

Poor growth, weight loss

Fevers, malaise

Abnormal CBC, elevated ESR

Abnormal radiographic findings: soft-tissue swelling, osteopenia, periosteal elevation, cortical destruction ("moth-eaten" lesion)

Junnila JL, Cartwright VW. Chronic musculoskeletal pain in children: part I. Initial evaluation. Am Fam Physician. 2006 Jul 1;74(1):115-22.

### After Pain Clinic

- Clinic provides comprehensive care
  - Education
  - Follow up in our clinic

### Access

TELEMEDICINE
LICENSED DC, MARYLAND, VIRGINIA

IN CLINIC

MARYLAND: ROCKVILLE, PG COUNTY, ANNAPOLIS

VIRGINIA: FAIRFAX

## Parent Resource

https://riseandshine.childrensnational.org/Topics/diseases-and-conditions/pain/

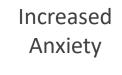


Did you know psychologists can help with chronic pain?

## Return to School: Anxiety and Pain

- Increased anxiety, depressed mood during pandemic
- Adolescents with chronic pain are at increased risk of anxiety (Noel et al., 2016)
- School Anxiety and avoidance often develop
  - 1/3 experience anxiety-related school avoidance (Mano, 2017)
  - Higher rates of school absences (Mano, 2017)











## Return to School: Rehab Approach to Treatment

- Goal of treatment for chronic pain is to focus on INCREASING FUNCTIONING
  - Pain reduces only <u>after functioning increases</u>
  - Increase activity level
  - Daily schedule/routine
  - Gradually increase exercise (prioritize consistency and low-impact)
- Expectation: Attend school daily
  - Pain/somatic symptoms are NOT reasons to miss school
- Students in home-based schooling:
  - Regular schedule
  - Facilitate social opportunities

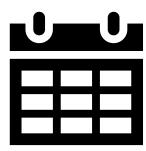


## Return to School: Before Day 1

- Healthy habits routine:
  - Eating schedule
  - Sleep hygiene gradually shift wake up time
  - Ample hydration
- Practice morning routine
- Regular movement throughout day
- Create daily schedule (school, homework, exercise, relaxation, social, fun activities)
- Visit the school or meet school personnel via Zoom







## Return to School: Preparing for Success

- Normalize anxiety and discomfort of return to school
- Address anxiety with exposure therapy
  - Creating hierarchy of feared situations, and gradually practice
- Create written Coping Plan (for pain & anxiety) for return to school
  - Relaxation and distraction strategies
  - Identifying in-school advocate
  - Establish regular check-ins with school counselor
- Anticipate how school will be different than February 2020
  - In person and hybrid models



### Return to School: 504 Plan Considerations

- Increase patients' confidence in pain management/emotion regulation with formal accommodations
- May look different due to Covid-19
- Prepare students for self-advocacy
- Flash Pass
  - Typical locations may be closed: outside locations, "breaks" in seat alternatives
- Access to hydration & snacks
  - Water fountains may be off: bring extra water bottles to school, reminder system through apps
- More travel time between classes

## How can Pediatricians Help?

- Normalize range of emotions and patient/family's fears
- Educate families on importance of:
  - Good sleep hygiene
  - Regular routine/schedule
  - Regular, low-impact exercise
  - Proper hydration and nutrition
- If safe for your patient, encourage school attendance
- Try to avoid homebound or home-and-hospital placements for youth with chronic pain who are safe to attend school
- Refer to behavioral pain medicine for patients with poor functioning, high anxiety, and/or school refusal

### Questions?

Thank you for your attention today!