## PAIN RELIEF AND THE POWER OF YOUR IMAGINATION

#### Sarah R. Martin, PhD Postdoctoral Scholar Pediatric Pain and Palliative Care Program (PI: Dr. Lonnie Zeltzer, MD) David Geffen School of Medicine at UCLA





National Heart, Lung, and Blood Institute

## All pain is real

# All pain is complex

Thoughts, feelings, attention, and social context can alter the experience of pain

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(Bushnell, Čeko, & Low, 2013; Moseley & Butler, 2015; Simons, Elman, & Borsook, 2014)

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Mind-body treatments target physiological pain processes

Our thoughts, focus, and feelings can change pain-brain pathways

(Jensen, Day, & Miró, 2014; Simons & Basch, 2016; Simons, Elman, & Borsook, 2014; Zeidan et al., 2015)







 A <u>guided</u> exercise to help you "daydream on purpose"
 Engages all of your senses to focus on relaxation/ enjoyment

@sarahraemartin

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## Mindfulness

Actively, purposefully paying attention

- Observing present moment experiences (thoughts, physical sensations)
- Observing in a non-judgmental, accepting manner



## <u>What to do</u>:

- Observe
- Describe
- Participate

### How to do it:

- Non-judgmentally
- One moment at a time
- Effectively, doing what works



# Self-Hypnosis

A state of heightened focused attention

- Involves a goal to bring about a specific change
- Outilizes imagination and the brain's ability to regulate the body and take control of pain, mood etc





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## Hypnosis treatment approach examples:







#### <u>Favorite place</u> •Where nothing bothers you

Pain switch Dial down the pain



#### Magic glove Protect body from discomfort



<u>Control center</u>Change sensations, mood

## Lesley's Favorite Place Video by Dr. Kuttner

<u>https://youtu.be/664kpkpiK38</u>



### Effects of Hypnosis during Pain in Sickle Cell Disease





#### **Guided Imagery and Pain**

at the UCLA Pediatric Pain and Palliative Care Program

### **Current/Future Directions**



- Examine the effects of hypnosis and social factors on pain in teens with SCD
- B Stay tuned for results...



#### Participate in a Guided Imagery Study

You may be eligible if:

- You are between 12 and 18 years old
- You have been diagnosed with sickle cell disease

Participation involves coming to UCLA for 1 laboratory visit. The visit will take 2 hours.

You will:

- Answer questions about your experiences with pain
- Complete a brief guided imagery or story-based exercise with a trained clinician. Guided
  imagery involves using your imagination to picture yourself in your favorite place.
- Participate in laboratory stress tasks involving heat, before and after the exercise
- Complete a brief interview about your experience

You will receive \$100 cash at the end of the study Your parent will receive either \$25 or \$40 cash (depending on how far away you live) to cover transportation and parking

For more information, call or text the UCLA research team:

#### (310) 500-8680 or email <u>SRMartin@mednet.ucla.edu</u>

Dr. Sarah Martin, PhD, and Dr. Lonnie Zeltzer, MD, at the UCLA Mattel Children's Hospital are conducting this research

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## **Take Home Messages**

<u>All pain is *real*</u> and complex.

 Biological, psychological, social, spiritual, ... factors play a role in pain processing

Treating pain involves retraining the brain and nervous system...<u>mind-body approaches are key</u>!

Imagery and neuromodulatory-based treatments (mindfulness, hypnosis) may offer added relief

## **THANKYOU!**



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Contact: SRMartin@mednet.ucla.edu (MATTE) Childrens Hospital Pediatric Pain & Palliative Care Program