## Under the Surface Mental Health in SCD



**CENTER FOR** Behavioral Health + Smart Technology

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#### Disclosures

 Consulting with Novartis, Pfizer and Global Blood Therapeutics





I'm Really Giving Up At Life, I Don't Have No Support Nor Help That I Need! This Sickle Cell Can Take Over Now, I Wanna Go To Heaven And Not Have To Suffer For No More!

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#### Psychosocial health in SCD What we see and what we can't

- Undiagnosed or misdiagnosed
- Left untreated or inadequately treated

# Depression in SCD

- 2-7% diagnosed with depression
- 21-57% report symptoms when asked



DepressionRecognizedUnrecognized

Jonassaint et al. Br J Haematol 2016

### Depression and health care utilization in SCD

Patients with SCD who run into depression experience poorer outcomes 2.3x more hospital visits for pain

Jonassaint et al. Br J Haematol 2016

# Is depression in SCD what we think it is?

- Dysthymia
  - 9:1 compared to major depression
- Poor self-management/adherence
- Irritability
  - $\rightarrow$  frustration, hostility, aggression
- Insomnia
  - 50% adults with SCD (V Mann-Jiles 2015)

## NEGATIVE THOUGHTS

- About myself
- About the World
- About my future

## **FACEBOOK POST**

**Tony**: In the Hospital <u>contaplating suicide</u>. Anyone knows where the Juggler vein is located in your neck? And <u>if I stab it with my</u> hospital fork how long would it take to bleed out?? Or what about the groan area.?? Which spot is more effective?? Somebody come threw.

**Kia**: I'm praying for you; suicide is never the answer...please talk to someone if you are seriously considering that as an option.

# Small social life

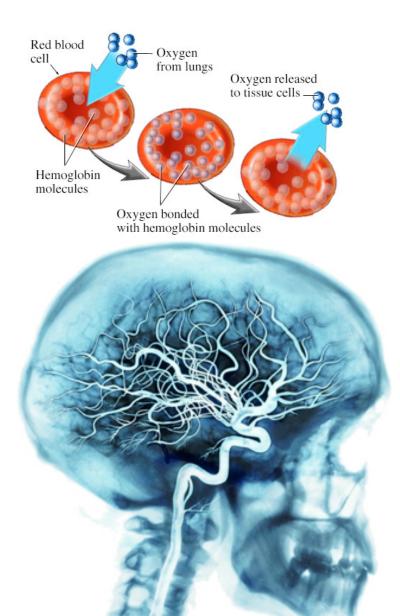
"...I didn't like the way the majority of the other kids ask me questions about myself"

"I shouldn't be making friends...because therefore I make them accept I'm dying"

# Negative interactions in the health care environment

- "you aren't really in pain"
- "you labs don't show there is anything wrong"
- "you're drug-seeking"
- "...a junkie"

## Hemoglobin $\rightarrow$ capacity to cope w/ stress



- 15% of cardiac output
- 25% of total oxygen supply
- 50% under cognitive demand

#### **EXTERNAL STRESSORS**

Job loss, family conflict, bills, child care, unexpected health complication

#### NEGATIVE THOUGHTS

Low self-efficacy, catastrophizing, self-doubt

#### **PAIN SYMPTOMS**

Uncontrolled pain and hospitalizations

#### Biopsychosocial model of SCD pain

#### **PERCEIVED STRESS**

Overwhelmed, helpless, life is out of control

#### DEPRESSED MOOD/ANXIETY

Feelings of depression, worry, irritability

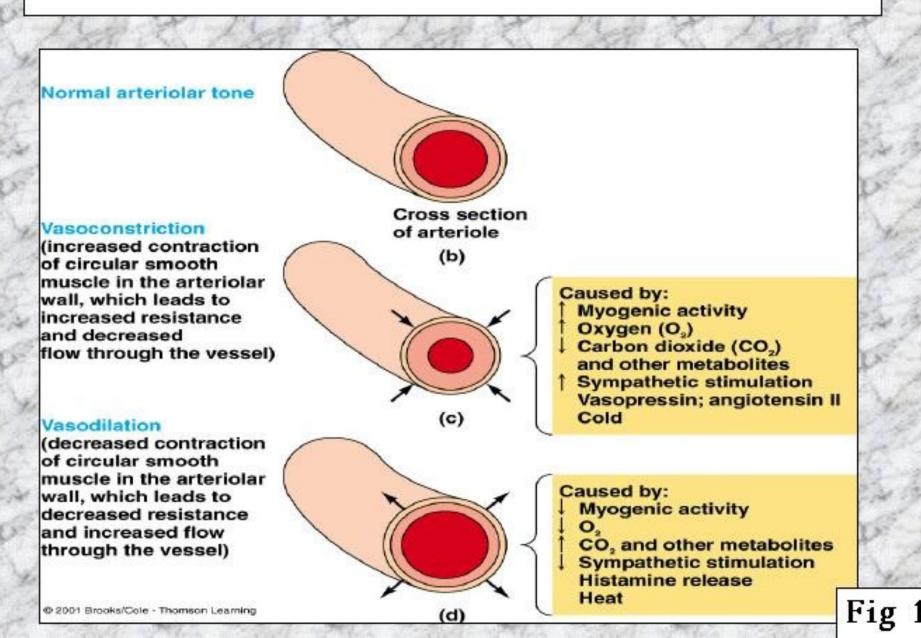
#### PHYSIOLOGICAL AROUSAL

Muscle tension, ↑ HR, BP adrenaline/cortisol

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# Fight or Flight Response

## Vasoconstriction and Vasodilation



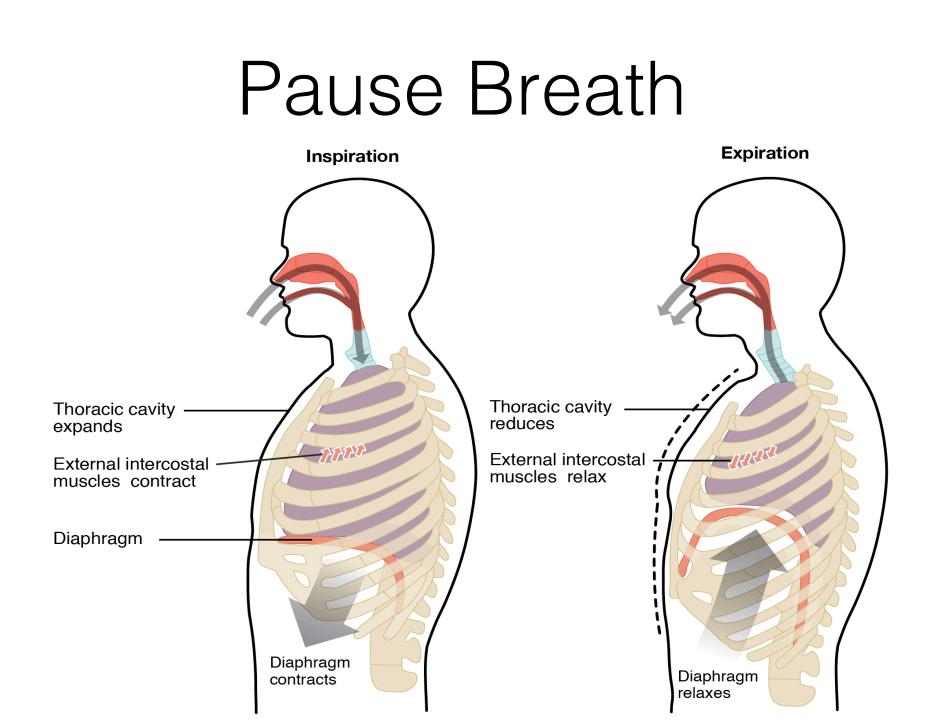


### Sickle Cell Blocking Blood Flov

# WHAT CAN I DO ABOUT IT?

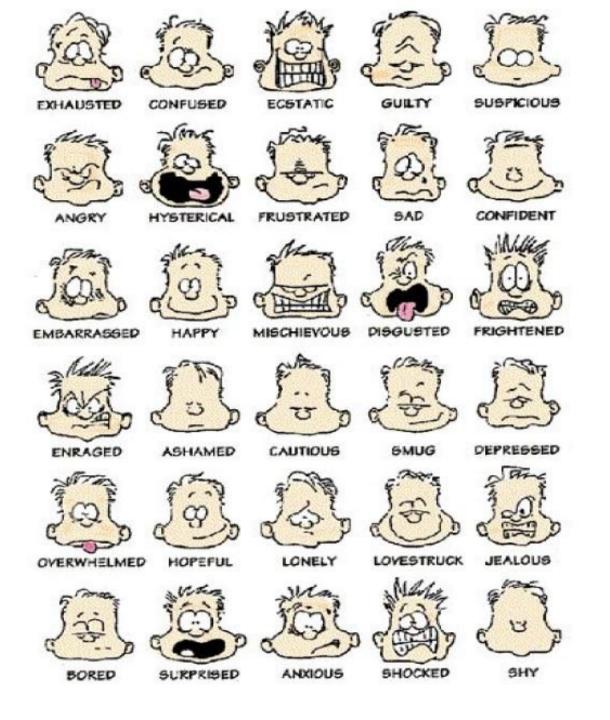
# Presence and Power

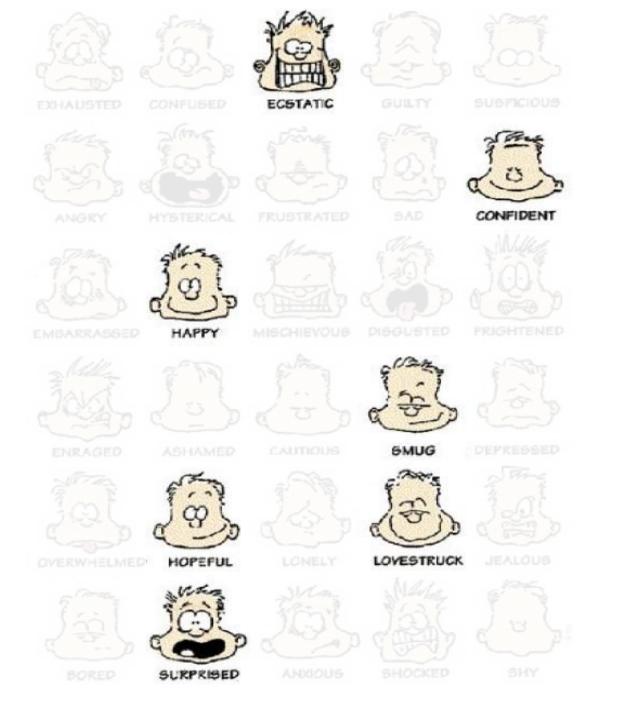




## Dr. Pennebaker's Basic Writing Assignment

over the next four days, write about your deepest emotions and thoughts about the emotional upheaval that has been influencing your life the most. In your writing, really let go and explore the event and how it has affected you. You might tie this experience to your childhood, your relationship with your parents, people you have loved or love now, or even your career. Write continuously for 20 minutes.





# Amplify Positive Emotions

 "Think back over the week and describe something that you did, or something that happened to you, that was positive and made you feel good. It can be something that you brought about or something that just happened."

# Get activated

- Behavioral activation
- Schedule pleasant activities
- Increase physical activity
- Increase social contacts



## The difficult fight

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