PAINWEEK

Causalytics – You're in Pain and It's all Your Fault

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1

Disclosure

- Nothing to disclose

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2

Learning Objectives

- Illustrate how precognitive thinking may negatively impact clinical decision-making in managing chronic pain
- Describe cognitive biases
- Identify common healthcare provider and patient biases regarding chronic pain and its treatment
- Distinguish the differences between implicit and explicit biases that exist in today's pain management environment
- Describe methods to help recognize, reflect upon, and circumvent potential stigmas to prevent compromise of patient care

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3

The Blame Game

- Reacting to people with chronic pain
  - Do we wince?
  - Do we wait to respond until we know
    - Cause?
    - Diagnosis?
    - Context?
  - Do we stigmatize?
  - Does it depend on the circumstance(s)?
    - Does it have to do with responsibility?
  - Is our level of empathy directly related to responsibility?

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Decety, J., Echols, S., Correll, J. The Blame Game: The Effect of Responsibility and Social Stigma on Empathy for Pain. *Journal of Cognitive Neuroscience*. 22:5, pp. 985–997, 2009

4

Or do we do it on the fly?

Do We Plan to Blame in Advance?

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Precognition or Cognition?

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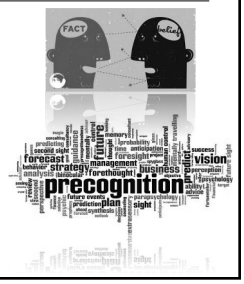
Are We Taught to Think *Before* We Know?

- **Precognition –**
  - Thinking that occurs ***before*** knowledge acquisition takes place
    - Do we ***predict*** the future?
    - Do we ***see*** the future?
    - Do we ***dictate*** the future?
    - Does ***empirical thinking*** shape our decisions?
    - Do we use our ***intuition***?
    - Do we ***judge***?
    - Do we ***label***??
      - If yes, *when*?
      - If yes, *why*?



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7

Why We Label

- **Growing number of (sometimes) conflicting opioid prescribing guidelines**
  - Aberrant drug-related behavior(s), overdose deaths
- **Negative media attention**
  - Stigma
    - Patient
    - Healthcare provider
- **Co-morbid medical complexity**
- **State mandates**
- **Competing educational programs**
  - Educational vacuum[1,2]
- **FEAR OF REGULATORY SCRUTINY**

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1. Mezei L, Murinson B. Pain education in North American medical schools. *J Pain*. 2011;12(12):1199-1208.
2. Bradshaw YS, Patel-Weeks N, Perez-Tamayo A, et al. Deconstructing one medical school's pain curriculum: ii. partnering with medical students on an evidence-guided redesign. *Pain Med*. 2017;18(4):664-676.

8

What Happens *When* We Know?

- **Cognition –**
  - The ***process*** of acquiring knowledge and understanding through thought, experience, and the senses involving:
  - **Intellect:**
    - Acquiring knowledge
    - Perceiving
    - Memory access/past experience(s)
  - **Processing**
  - **Reasoning**
  - **Understanding**
  - **Transduction**
    - Language/words
  - **Formation of beliefs and attitudes?**
    - When??

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9

The Patient Perspective

- **Pain patients often feel the need to prove pain is real**
  - Subjective Sx vs objective findings
- **Stigmatization is real**
  - Opioids
  - Physical limitations
  - Social limitations
- **Reaction(s) to pity**
- **Reaction(s) to sympathy**
  - *Not* the same as empathy
- **Suspicion about malingering**
- **Loneliness**
- **Everything else…**

10

The Need for Individuality and Choice

- **Self-reported pain ratings are subjective**
- **Patient needs and treatment should be highly individualized**
  - Context ***ALWAYS*** varies
- **Highly valuable contributory information should not be ignored**
- ***BUT AVOID*:**
  - Gut checks
  - Over-reliance on prior experience
  - Superimposition of anecdotal experience

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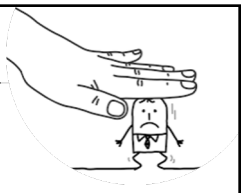
11

Patients are Individuals

There may be many things that the standard assessment processes *may not capture*

- Emotional states
- Emotional challenges
- Cultural challenges
- Cultural differences
- Different external pressures that they have in their lives



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12

Precognitive Judgments

- Like it or not, *we* bring precognitive judgments and thinking into the exam room with us every time we see a patient, probably before we even meet the patient
- We read about them before we ever meet them
  - We then judge them based on what we see *and* how we feel

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13

The End Result

Potential Corruption of Assessment and Treatment

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14

Patients Judge Too…

- Patients judge themselves
- Patients judge us

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15

Consider

- You may not have the ***"whole picture"***
  - –At any given time, a person is dealing with many factors of which you're unaware
- The way you think and feel about a situation may be very different from one day to the next, influenced by various elements, including ***your*** **current mood**
- Under emotional stress, ***you may behave very differently*** than you think you would

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16

Are taught them from the beginning?

We are Fully Stocked with Cognitive Biases…

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17

Cognitive Biases in Pain Management

- Attribution error
- Anchoring
- Premature closure
- Search satisfaction
- Zebra retreat
- Blind-spotting
- Clustering illusion
- Bandwagon effect
- Authority bias
- Availability heuristic
- Conservatism bias
- Ostrich effect
- Outcome bias
- Zero-risk approach
- Placebo effect
- Recency
- Search satisfaction
- Overconfidence

1. Cognitive Bias. *The Decision Lab*. [redacted]. Accessed July 16, 2019.
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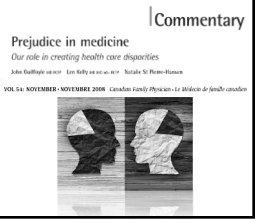
18

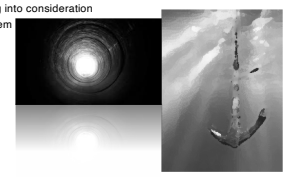
Cognitive Biases

- **Attribution error**
  - **Explaining a patient's condition on the basis of their disposition or character rather than seeking a valid medical explanation**
  - ***Why?***
    - Because we stereotype
    - Because there are so many things to pick from…
      - Race
      - Gender
      - Age
      - Socioeconomic status
      - Educational level
      - Medical/substance abuse history
      - Diagnosis
      - Etc
    - ***What to do?***
      - Be aware



Cognitive Biases

- **Anchoring**
  - **Focusing on:**
    - One particular sign or symptom (usually the first… –sound familiar?)
    - One piece of information
    - Hanging onto one particular diagnosis without taking into consideration other possibilities, or discounting and/or ignoring them
  - ***Why?***
    - Efficiency – we learn fast
    - We learn from experience
  - ***End result*** – tunnel vision
  - ***What to do?***
    - Reassess
    - Reconsider diagnosis if
      - New signs or symptoms
      - Unexpected course of treatment
      - Lack of progress
      - Unexpected outcome



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Cognitive Biases

- **Premature closure**
  - **Acceptance of an initial diagnosis**
    - Failing to challenge it or look any further
  - ***Why?***
    - I was always taught that if you give a patient enough time, they will tell you what's wrong with them
  - ***What to do?***
    - *Always* have a differential
    - Look for "red flags"
      - Follow-up on them
    - Consider the worst-case scenario (only as a possibility to ensure you don't miss something) and then *rule it out*
    - Consider a 2nd brain/set of eyes – consult with a colleague

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Cognitive Biases

- **Search satisfaction**
  - **When an abnormality is found**
    - The search is ***OVER***
  - ***Why?***
    - So we can pin the tail on the donkey!
    - How many times have you heard people mention "*I have herniated discs*"?
  - ***What to do?***
    - Ask yourself ***more than once*** if something else might be going on

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22

Cognitive Biases

- **Zebra retreat**
  - **If it's not common, it can't be the diagnosis**
    - Not considering the rare case
  - ***Why?***
    - Because we're taught not to think of zebras, we're taught to think of ducks…
      - *Usually* good advice
    - "*Go where the money is*"
  - ***What to do?***
    - ***Rule out*** *the* zebra

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23

Cognitive Biases

- **Blind-spotting**
  - Being less likely to detect bias in yourself than in others
  - ***Why?***
    - To some degree, it's natural…
      - Unrelated to
        - » Intelligence
        - » Self-esteem
        - » Ability to make unbiased judgments
    - We tend to "do what we know" and think it's best
  - ***What to do?***
    - Look in the mirror
    - Self-awareness
    - Identify who and what makes you feel uncomfortable
      - Figure out why

Ross, S. Researchers Find Everyone Has a Bias Blind Spot. *Carnegie Mellon University News*. June 8, 2015.

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24

Cognitive Biases

- **Clustering illusion**
  - **The tendency to see patterns in random events**
  - ***Why?***
    - Because we believe in streaks
    - Because we all have some kind of gambling tendency
  - ***What to do?***
    - Realize it's a fallacy
    - A bad case is just a bad case

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25

Cognitive Biases

- **Bandwagon effect**
  - **When a diagnosis "sticks" to a patient potentially distorting the diagnostic process**
    - eg, the patient with a history of substance abuse presents with bona fide pathology and pain and is assumed to be drug-seeking
  - ***Why?***
    - Because everybody has a "permanent record"…
  - ***What to do?***
    - Diligent assessment
    - Consciously come to a diagnosis
    - Take a diagnostic "time out"

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26

Cognitive Biases

- **Authority bias**
  - **Consciously deciding to disagree with an "expert" or person with authority**
  - ***Why?***
    - Because the "White Ivory Tower" is not "Main Street"
    - Because we like to go against authority
  - ***What to do?***
    - Know your limitations
    - Make sure to listen to both patient *and* the expert and then come to your own conclusions based on objective analysis
    - Make sure every member of the "team" has an equal voice

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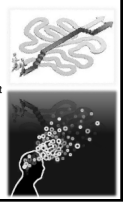
27

Cognitive Biases

- **Availability heuristic**
  - **Recent or vivid diagnoses come to mind first and are overemphasized**
    - I just had a patient with…
  - ***Why?***
    - Think ***mental shortcut***
  - ***What to do?***
    - Remember patient individuality
    - Watch for inconsistencies with common, less serious diagnoses
    - Beware over-investigating because recent unexpected diagnosis in another patient



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28

Cognitive Biases

- **Conservatism**
  - **Favoring old evidence over new information**
  - ***Why?***
    - *"It's the way I was taught"*
    - *"This has always worked before"*
    - *"If it isn't broken, don't fix it"*
  - ***What to do?***
    - Keep an open mind
    - Come to Vegas to PAINWeek every September
    - Measure what the young'uns say after listening
    - Understand that change is usually a good thing

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29

Cognitive Biases

- **Ostrich effect**
  - **Pretty much self explanatory**
  - ***Why?***
    - Because we like to avoid difficult
      - Situations
      - Discussions
      - Outcomes
  - ***What to do?***
    - Don't abandon patients
      - Firing them
      - *"I don't prescribe opioids"*
      - *"All patients are drug seeking"*
    - Don't make assumptions based on the diagnosis without context
      - *"There are two types of patients that just get the opioid prescription: cancer and sickle cell"*

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30

Cognitive Biases

- **Outcome bias**
  - **Judging the quality of a decision based on the outcome instead of the process of how the decision was made**
  - ***Why?***
    - Because we'd all rather be lucky than smart, right?
  - ***What to do?***
    - Try to standardize the decision-making process
    - Avoid pendulums
    - Base and document decisions based on ethical principle(s)

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31

Cognitive Biases

- **Zero-risk**
  - **Avoidance of risk at all costs – even if the result is counterproductive**
  - ***Why?***
    - We like predictable outcomes
    - We like to avoid harm
    - Nonmaleficence is what we consider to be the most important ethical principle
    - Because risk mitigation is a very current topic
  - ***What to do?***
    - Consider that risk mitigation is *not* risk elimination
      - Think about anti-coagulation…
    - Risk/benefit analysis and informed consent (documented)

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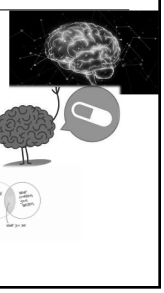
32

Cognitive Biases

- **Honorable mention…**
  - **Placebo effect**
    - Doing something is better than doing nothing
  - **Recency**
    - *"I just learned about this at a conference"*
  - **Search satisfaction**
    - Once you find something, you stop looking for other things
  - **Overconfidence**
    - Who me?



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33

Implicit or Explicit Bias?

- **Implicit bias**
  - ***Unconscious*** attitude(s) or stereotype(s) that may affect:
    - Understanding
    - Actions
    - Decisions
  - We all have them…
  - May be ***favorable or unfavorable***
  - Activated ***involuntarily***
    - Usually without awareness or intentional control

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Implicit vs. Explicit Bias. Study.com. [illegible] Accessed August 1, 2019.

34

Implicit or Explicit Bias?

- **Explicit bias**
  - Attitude(s) or stereotype(s) we may have about a person or group on a ***conscious*** level
  - ***Deliberate***
  - Generally ***unfavorable***
  - When people perceive their biases to be valid, they may be more likely to justify unfair/unequitable treatment
  - Can have ***significant negative impact*** on patients' physical and mental health

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Implicit vs. Explicit Bias. Study.com. [illegible] Accessed August 1, 2019.

35

What is the Clinical Impact?

So What Does all this Mean?

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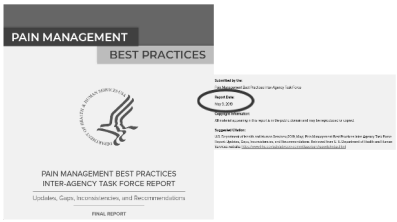
36

Bias, Stigma, and Pain



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37

Pain Management Best Practices Inter-Agency Task Force

- "***Established to propose updates to best practices and issue recommendations that address gaps or inconsistencies for managing chronic and acute pain***"
  - The U.S. Department of Health and Human Services guided this effort along with the U.S. Department of Veterans Affairs and U.S. Department of Defense
  - The Task Force consisted of representatives from relevant HHS agencies, the Departments of Veterans Affairs and Defense and the Office of National Drug Control Policy
  - Non-federal representatives included from diverse disciplines and views, including experts in areas related to pain management, pain advocacy, addiction, recovery, substance use disorders, mental health, and minority health and more

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38

Stigma

- ***"Stigma can be a barrier to treatment of painful conditions"***
- **Often presents a barrier to care and is often cited as a challenge for:**
  - Patients
  - Families
  - Caregivers
  - Clinicians
  - Social dynamics
- **In the current environment, patients with chronic pain — particularly those being treated with opioids — can be stigmatized**
- **May be exacerbated when co-morbidities exist**
  - Anxiety
  - Depression
  - Substance use disorder
  - Etc

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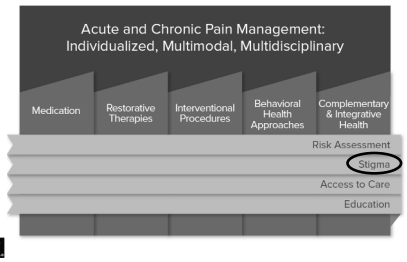
39

Treatment Approaches Informed by Four Critical Topics



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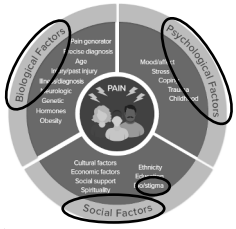
40

The Biopsychosocial Model of Pain Management



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41

Stigma

- ***"Studies suggest that patients who are receiving or who have previously received long-term opioid therapy for nonmalignant pain face both subtle and overt stigma from:"***
  - Family
  - Friends
  - Coworkers
  - The healthcare system
  - Society
  - Insurers

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42

Stigma

- Feelings of ***guilt, shame, judgment, and embarrassment*** resulting from stigma can increase the risk for behavioral health issues, such as anxiety and depression
  - Which can further contribute to ***symptom chronicity***
- *"The sub-population of patients with painful conditions and comorbid substance use disorder (SUD) face **additional barriers** to treatment because of stigmatization of both chronic pain and addiction."*
- *"Chronic pain is common among individuals with SUD, including opioid misuse, yet **stigma remains a significant barrier** to implementation of programs and treatments for such as medication-assisted treatment and naloxone"*

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43

Recommendations

"Reducing barriers to care that exist as a consequence of stigmatization is crucial for patient engagement and treatment effectiveness"

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44

Recommendations

"Increase patient, physician, clinician, non-clinical staff, and societal education on the underlying disease processes of acute and chronic pain to reduce stigma"

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45

Recommendations

"Increase patient, physician, clinician, non-clinical staff, and societal education on the disease of addiction"

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46

Recommendations

"Counter societal attitudes that equate pain with weakness through an awareness campaign that urges early treatment for pain that persists beyond the expected duration for that condition or injury"

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47

Recommendations

"Identify strategies to reduce stigma in opioid use so that it is never a barrier to patients receiving appropriate treatment, with all cautions and considerations, for the management of their chronic pain conditions"

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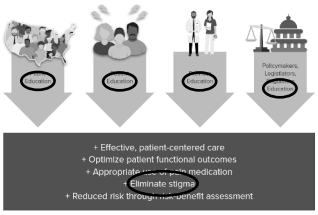
48

Does Education Make a Difference?



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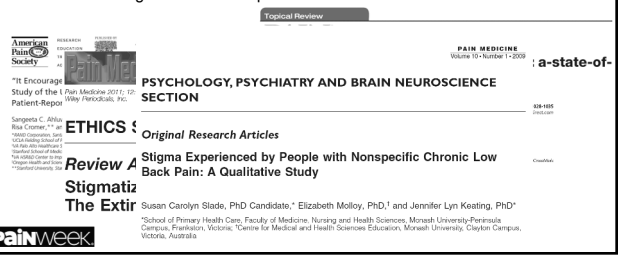
49

Final Thoughts…

- The issue of stigma and chronic pain is ***not new*** **and** ***not ours alone***


Topical Review

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PSYCHOLOGY, PSYCHIATRY AND BRAIN NEUROSCIENCE SECTION

Original Research Articles

Stigma Experienced by People with Nonspecific Chronic Low Back Pain: A Qualitative Study

Susan Carolyn Slade, PhD Candidate,* Elizabeth Molloy, PhD,† and Jennifer Lyn Keating, PhD*

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50

Watch for Certain "Markers"

- **Malingering**
  - –Be really sure
- ***"The patient failed a trial/course of therapy…"***
  - –Who failed who?
- ***"The last five people I went to see for this didn't help me"***
  - –What is the definition of help?
- **Drug-seeking/doctor shopping**
  - –Be really sure
- **Lying**
- **These are just a few examples…**
  - –There are so many more

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51

Final Thoughts…

- **Reflect**
  - Your/our common biases
- **Recognize** what might happen before knowledge is acquired
- **Think** about when/how we formulate beliefs and what drives us to them
- **Consider** that the potential negative impact of precognitive thinking and bias
  - Depression
  - Anxiety
  - Low self-esteem
  - Social detachment
  - Suicide?
- **This *can* affect treatment outcomes**
  - Bad for the patient
  - Bad for us
  - Bad for everyone

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52

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"Cure sometimes, treat often, comfort always."
— Hippocrates

53

QUESTIONS?

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54