An Integrated Multidisciplinary Introduction to Pain Treatment Renate Rosenthal, Ph.D. (Clinical Psychologist) & Trevor Sweatman, Ph.D. (Pharmacologist) University of Tennessee Health Science Center, Memphis

Approaching the Opiate Crisis from an integrated bio-psycho-social perspective, not focusing only on the drugs

Setting:

Audience: Second Year Medical Students.

Opportunity: As part of the Musculo-Skeletal System (one of our "Organ System" modules).

Format: Classroom instruction, followed by a 2-hour "modified" Team-Based Learning Exercise, featuring three representative case scenarios.

Classroom Topics:

Brief introduction to pain pathways and brief anatomy review (Low Back) Brief introduction to ACEs (Adverse Childhood Experiences) as an underlying common denominator for somatic symptom disorders, PTSD, risk factor for substance abuse, and "benign" chronic pain.

Mechanism of action, side effects, and abuse potential of opiates and nonnarcotic analgesics.

Introduction to non-pharmacological treatment options for chronic "benign" back pain, presented by a physical therapist.

Team-Based Learning ("TBL")

Following the required pre-study, classroom session, and a brief quiz over the material, students convene in the large TBL Room. The class is divided into small groups of 8 participants to discuss representative clinical case scenarios and develop their own recommendations.

For each case, students are given a set of questions or prompts (details to follow).

Not all tables will have come to the same conclusions for all cases, which opens the door to a fruitful discussion.

The Three Team-Based Learning Scenarios

1: Acute issue. "My hip, my hip!" Elderly patient with recent hip surgery following a slip-and-fall, to be sent home from hospital.

2: Terminal and palliative care issue. "And in the end!" Patient with terminal metastatic breast cancer and a history of substance abuse, in severe pain.

3: Chronic "benign" issue. "My back is killing me!" Manual laborer with chronic back pain, unsuccessful surgeries, addicted to opiates.

Case 1:

Well-adjusted and likeable elderly patient being discharged home with possible pain, following hip surgery.

Questions: Discharge her on opiates? Why? Why not? If yes, how many? For how long? If no, why not? What else needs to be done to maximize her recovery? Discussion: Importance of care instructions, home health care, and physical therapy.

Case 2:

Hospice care for 43-year-old woman with advanced metastatic breast cancer. She has a well-document history of previous substance abuse.

Questions:

How best to attend to the patient's suffering?What impact does her care have on her quality of life?Does a history of substance abuse preclude use of opiates?Discussion: Non-judgmental use of opiates with terminal illness.Opportunity for brief introduction to palliative and end-of-life care.

Case 3:

Manual laborer with multiple unsuccessful back surgeries for chronic back pain, lots of ACEs, poor insight, anger issues, and opiate addiction.

Questions:

Countertransference (feeling dislike for the patient)? Should we screen for depression and suicidal ideation? Did his prior treatments make his situation worse? What would be appropriate patient education? Does he need emotional support? Discussion: human and economic toll of poorly managed "benign" chronic pain.

Epilogue:

- At the end, each TBL group was asked to put themselves in the position of the patient (Empathy Exercise), and then, of the treating physician (Reflection Exercise), for each of the three scenarios.
- After group discussion, each table submitted their collective thoughts.

Examples

Empathy Exercise : In the patients' words

Case 1: "I am afraid I won't get my activity levels back to normal. I want to run around and follow my grandkids."

Case 2: "I want to be able to die in peace but able to speak with my family and friends before I pass. I'm worried about having an allergic reaction though due to my past. I am worried that the opioids will not be enough, and my final days will be wasted in agony."

Case 3: "I feel ashamed and emasculated. I can't support my family and they see me as lazy. My angry, violent, alcoholic father has made me fearful and hesitant around authority figures."

Examples Reflection Exercise: How did each scenario make you feel?

Case 1: "She has a clear problem, so pain management would be targeted at getting her through the acute condition."

Case 2: "The second patient is dying, so treatment would be focused on improving quality of life."

Case 3: "Treatment of patient three is more complex and would involve education, psychological support, and hopefully physical therapy. Ultimately, we would hope to improve their health holistically."

General Observations:

- Students were very engaged in the TBL scenarios. There were lively discussions that built on the classroom content.
- Students rendered insightful and honest reflections.
- They seemed to understand the importance of learning the patient's "story," rather than resorting too quickly to the prescription pad, or pre-judging difficult patients as drug-seeking or unmotivated.

Our Conclusions:

 Introduction to opiates and pain medications, as well as integrative treatment approaches can easily be woven into the basic science curriculum, at clinically relevant junctures.

Our Conclusions:

• Students were empathic and honest. They freely admitted to feeling helpless and uncomfortable if a patient is in pain.

Our Conclusions:

- Students must learn that they can help and comfort patients in "benign" pain, without prescribing opiates or rushing into surgical interventions.
- This includes non-pharmacological approaches, such as PT, patient education, empathic listening, and emotional support.
- History of substance abuse does not need to be a barrier to giving pain relief to terminally ill patients.

Primum non-nocere: A painful challenge

Here is our challenge:

How do we maintain a clear, consistent and empathic basic science educational message and bring it forward into the clinical years, in an era of opiate hysteria, prescription myopia and limited alternative resources?

The End

Questions? Comments?

References:

https://www.hhs.gov/opioids/about-the-epidemic/index.html

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Larkin H, Shields JJ, Anda RF. The health and social consequences of adverse childhood experiences (ACE) across the lifespan: an introduction to prevention and intervention in the community. J Prev Interv Community. 2012;40(4):263-70.

"My back is killing me" clinical scenario adapted from a Resident-level Interprofessional Team-Based Learning Module: Chronic Non-Cancer Pain

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