Biopsychosocial approach to pain

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• I have no disclosures
Biopsychosocial model

- Biological: Intensity & nature of pain
- Psychological: Distress & health beliefs
- Social: Effect on daily functioning

HIGHLAND EMERGENCY
DEPARTMENT OF EMERGENCY MEDICINE
ALAMEDA HEALTH SYSTEM - HIGHLAND HOSPITAL
The Dueling Obligations of Opioid Stewardship
Our Mission & Our Work

Street Level Health Project is an Oakland-based grassroots organization dedicated to improving the health and wellbeing of underserved urban immigrant communities in the Bay Area.
Emergency Medicine
Opiophobia

No drugs for you!

Just say no
The nurses work so hard it seems only polite to flirt with them.

Arthur has been incorrigible his whole life. So if there’s a twinkle in his eye, at least you know he’s having one of his better days.
Pain as the fifth vital sign

**Pain Intensity:** broadly categorized as: mild, moderate and severe. Numeric scale to rate pain intensity where 0 = no pain and 10 is the worst pain imaginable:

- **Mild:** <4/10
- **Moderate:** 5/10 to 6/10
- **Severe:** >7/10

Herring & Clattenberg 2014: NHAMCS ED Data 97-08
WHO’s Pain Relief Ladder

1. Non-opioid +/- Adjuvant
2. Opioid for mild to moderate pain +/- Non-opioid +/- Adjuvant
3. Opioid for moderate to severe pain +/- Non-opioid +/- Adjuvant

Freedom from pain

Pain persisting or increasing
We’re number 1!!

United States of America, 1964
Austria, 1964
Australia, 1964
Ireland, 1964

Denmark, 2008
Germany, 2008
United Kingdom, 2008
Spain, 2008
OLigo-analgesia

opioid excess
Think outside the pill
There is no easy fix for pain
Physical symptoms:
- Chest pressure or tightness
- Indigestion
- Stiffness
- Palpitations
- Shortness of breath
- Photosensitivity
- Rash
- Difficulty passing urine
- Nausea or vomiting
- Weakness
- Hearing loss
- Difficulty passing urine
- Mobility problems
- Swallowing difficulty
- Hunger or thirst
- Swelling
- Unteadiness

Emotional distress:
- Concern
- Stress
- Uncertainty
- Agitated
- Wanting to go home
- Low mood
- Boredom
- Adjustment difficulties
- Bereavement
- Fear
- Anxiety
- Worry
- Embarrassment

Treatment:
- For physical symptoms
- For emotional distress

Information:
- Diagnosis
- Explanation
- Advice
- Reassurance

Care:
- Friendly, efficient staff
- Conversation
- Food
- Going home

Closure:
- Being seen promptly
- Being referred
- Resolving the problem
Solution to opioid

- Empathy
- Solidarity
- Advocacy
- Commitment
- Kindness

Diagram:
- Profit
- Flood of opioids
- Social inequality
- Stigma
- Abandonment
- Marketing
- Naloxone
- Punitive policies
- Opioid restrictions
- DEA busts
- CUR
- ES
Focus Social determinants of opioid morbidity

- Relationship based
- people based
- low-tech
- integrity
- De-medicalized
Focus Social determinants of opioid morbidity

• Access to clean safe community spaces for health maintenance and personal development

• Access to a supportive network of people to assist and problem solve
Rationalizing opioid use in the emergency department
Nationally, large increases in opioid utilization occurred throughout the medical system from 1990-2010 based, in part, on overestimation of the therapeutic potential of opioids and an underestimation of associated risks including chronicification of pain and dependency.

**June 2014** an opioid guideline was implemented in the emergency department supported by small group discussion and literature review with providers, dissemination of guidelines into clinical areas, and nursing education.

**July 2014** significant declines in the total and proportion of emergency department patients prescribed an opioid was observed.

**37%** decline from 2006-13 baseline after guideline implementation

Is pain socially determined?

- Biological: Intensity & nature of pain
- Psychological: Distress & health beliefs
- Social: Effect on daily functioning
The report of physical pain doubled in the low income group.
Increased pain and disability associated with low SES neighborhoods.
Women aged 15-44 years who filled a prescription for an opioid medication, 2008-2012:

- Privately Insured: 28%
- Medicaid Enrolled: 39%

**TABLE 2. Number and rate of deaths attributed to overdoses of prescription opioid drugs, by Medicaid status --- Washington, 2004--2007**

<table>
<thead>
<tr>
<th>Status</th>
<th>No.</th>
<th>Crude rate*</th>
<th>Age-adjusted rate†</th>
<th>Age-adjusted RR§ (95% CI¶)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>758</td>
<td>14.8</td>
<td>30.8</td>
<td>5.7 (5.3--6.1)</td>
</tr>
<tr>
<td>Medicaid PRC** program</td>
<td>34</td>
<td>580.4</td>
<td>381.4</td>
<td>92.6 (64.1--129.5)</td>
</tr>
<tr>
<td>Non-Medicaid</td>
<td>910</td>
<td>4.5</td>
<td>4.0</td>
<td>Referent</td>
</tr>
</tbody>
</table>
More Educated Emergency Department Patients are Less Likely to Receive Opioids for Acute Pain

Timothy F. Platts-Mills¹,², Katie M. Hunold¹, Andrey V. Bortsov¹, April C. Soward¹, David A. Peak³, Jeffrey S. Jones⁴, Robert A. Swor⁵, David C. Lee⁶, Robert M. Domeier⁷, Phyllis L. Hendry⁸, Niels K. Rathlev⁹, and Samuel A. McLean¹,²

Crude and adjusted proportions of patients receiving opioids.

<table>
<thead>
<tr>
<th>Education</th>
<th>N</th>
<th>% Receiving Opioids (95% CI)</th>
<th>N</th>
<th>Adj. % Receiving Opioids (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Patients</td>
<td>683</td>
<td>27 (24–31)</td>
<td>615</td>
<td>-</td>
</tr>
<tr>
<td>8–11 years</td>
<td>28</td>
<td>54 (35–71)</td>
<td>26</td>
<td>39 (22–60)</td>
</tr>
<tr>
<td>High School</td>
<td>138</td>
<td>31 (24–39)</td>
<td>120</td>
<td>26 (19–35)</td>
</tr>
<tr>
<td>Post-High School</td>
<td>267</td>
<td>34 (29–40)</td>
<td>247</td>
<td>29 (23–35)</td>
</tr>
<tr>
<td>College Graduate</td>
<td>163</td>
<td>18 (13–25)</td>
<td>142</td>
<td>19 (15–26)</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>87</td>
<td>10 (6–19)</td>
<td>80</td>
<td>13 (7–23)</td>
</tr>
</tbody>
</table>

<11yrs | post grad
Why?
Poverty
social
disempowerment

Medicalization of Suffering

Lack of support or treatment

Iatrogenic Opioid addiction
If you look at people who seek a lot of care in American cities for multiple illnesses, it's usually people with a number of overwhelming illnesses and a lot of social problems, like housing instability, unemployment, lack of insurance, lack of housing, or just bad housing.

Paul Farmer
Focus Social determinants of opioid morbidity

- Relationship based
- people based
- low-tech
- De-medicalized
Focus Social determinants of opioid morbidity

• Access to clean safe community spaces for health maintenance and personal development

• Access to a supportive network of people to assist and problem solve
Patient 1

• 28 year old female recently discharged from jail presents requesting refills of Soma, Norco, and lorazepam.

• She explains that she was shot 2 years ago and reports PTSD, insomnia, and chronic leg pain
Patient 1

• Is this patient doctor shopping?

• What is the role of prescription drug monitoring in this patient?
Prescription Drug Monitoring Programs: Examining Limitations and Future Approaches

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James A. Feldman, MD‡

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Good opioid patient

Bad opioid patient
Good opioid patient

Legitimate suffering

“real pain”

“needs surgery”

Bad opioid patient

ilLegitimate suffering
drug seeking addict
The immaculate prescription
VICODIN: THE BOLDFACED PILL

“Everyone who makes it starts popping them,” Courtney Love (who was arrested in 2003 for pill possession in Beverly Hills) once told Us Weekly. “I did it. I loved it. I also ended up in rehab.”

Rush Limbaugh’s housekeeper outs his habit; He goes to rehab three times. His 2001 hearing loss may be a side effect.

Eminem took ten to twenty pills a day, got a Vicodin tattoo.

Nicole Richie admitted she took Vicodin and smoked pot before driving her SUV the wrong way down a highway in 2006.

Brett Favre’s now-wife nearly left him over his Vicodin abuse (he once took thirteen the night of the ESPY Awards); he went to rehab in 1996.

Cindy McCain, then addicted to Vicodin, was investigated by the DEA after stealing pills from her own medical charity.

Kelly Osbourne

Albert Gore III was pulled over in his Prius on July 4, 2007, and found to have 140 Vicodin on him. He was arrested.

Ozzy Osbourn
Patient 2

- 52 year old woman with chronic back pain, diabetes, arthritis. Presents with back pain having run out of Norco. She is crying.
Patient 2

• What is the role of an opioid prescribing guideline?

• What is the role of limiting opioids to a single provider? (referring to PMD for refill)
Thinking about pain:

The same intensity of nociceptive stimulation can give rise to varying conscious perceptions of pain.

Pain related coping associated with chronic pain and disability

Catastrophizing: a tendency to magnify or exaggerate the threat value or seriousness of pain sensations

Kinesiophobia: fear of movement

Low self-efficacy: low confidence in one’s ability to carry out necessary activities despite pain; low confidence in one’s ability to reduce pain without medications.

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Mean post-MEPP and psychological symptom scores by education category.

<table>
<thead>
<tr>
<th>Education</th>
<th>Score\textsuperscript{a,b} (Mean (SD))</th>
<th>Pain Catastrophizing mean (SD)</th>
<th>Perceived Life-Threat mean (SD)</th>
<th>Intervener Rating of Distress mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Patients</td>
<td>13.5 (3.8)</td>
<td>4.2 (1.1)</td>
<td>4.4 (3.2)</td>
<td>1.9 (2.2)</td>
</tr>
<tr>
<td>8–11 years</td>
<td>14.3 (2.6)</td>
<td>4.3 (1.4)</td>
<td>5.4 (2.6)</td>
<td>2.7 (2.0)</td>
</tr>
<tr>
<td>High School</td>
<td>13.0 (2.3)</td>
<td>4.2 (1.2)</td>
<td>4.8 (2.1)</td>
<td>2.3 (2.3)</td>
</tr>
<tr>
<td>Post-High School</td>
<td>14.0 (2.5)</td>
<td>4.8 (1.1)</td>
<td>4.0 (2.4)</td>
<td>2.4 (2.4)</td>
</tr>
<tr>
<td>College Graduates</td>
<td>14.6 (2.2)</td>
<td>4.6 (1.6)</td>
<td>4.4 (1.9)</td>
<td>2.6 (1.9)</td>
</tr>
<tr>
<td>Post Graduates</td>
<td>14.6 (2.3)</td>
<td>4.6 (1.6)</td>
<td>4.8 (1.6)</td>
<td>2.8 (1.6)</td>
</tr>
<tr>
<td>p-value\textsuperscript{c}</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

\textsuperscript{a,b} Significant at \( p < .05 \).

\textsuperscript{c} Significant at \( p < .001 \).
Patient 3

- 32 year old male, end stage renal disease on HD.
- History of substance abuse
- Requests hydromorphone and benadryl
Patient 3

- What is the role of pain contract?
- Opioid limits?
- Naloxone kit?
Focus on the Social determinants of opioid morbidity

• Relationship based
• people based
• low-tech
• De-medicalized
Social determinants of opioid morbidity

- Access to **clean safe community spaces** for health maintenance and personal development

- Access to a **supportive network of people** to assist and problem solve
Focus Social determinants of opioid morbidity

• Access to clean safe community spaces for health maintenance and personal development

• Access to a supportive network of people to assist and problem solve
• Thanks

• andrew.a.herring@gmail.com
Top Ten issues for the biopsychosocial pain practitioner

• Catastrophizing and the expression of pain

• Understand the limits of judgement; connect, don’t judge

• Connect before you prescribe

• Maintain integrity

• offer help without offering a pill
These approaches represent movement toward an egalitarian relationship in which the clinician is aware of and careful with his or her use of power.

Underlying the analysis of power in the clinical relationship is the issue of how the clinician handles the

strong emotions that characterize everyday practice. On the one hand, there is a reactive clinical style, in which the clinician reacts swiftly to expressions of hostility or distrust with denial or suppression. In contrast, a proactive clinical style, characterized by a mindful openness to experience, might lead the clinician to accept the patient’s expressions with aplomb, using the negative feelings to strengthen the patient-clinician relationship.35 The clinician must acknowledge and then transcend the tendency to label patients as “those with whom I get along well” or “difficult patients.” By removing this set of judgments, true empathy can devolve from a sense of solidarity with the patient and respect for his or her humanity, leading to tolerance and understanding.18 Thus, in addition to t

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Read more at http://www.brainyquote.com/quotes/authors/p/paul_farmer.html#d7ZQcIhvHg317ce7.99
pain treatment without pills?
Pain Intensity: broadly categorized as: mild, moderate and severe. Numeric scale to rate pain intensity where 0 = no pain and 10 is the worst pain imaginable:

Mild: <4/10  
Moderate: 5/10 to 6/10  
Severe: >7/10  

Herring & Clattenberg 2014: NHAMCS ED Data 97-08
“DOC, I NEED SOMETHING STRONGER”

Combination Oxycodone 5 mg/Ibuprofen 400 mg for the Treatment of Postoperative Pain: A Double-Blind, Placebo- and Active-Controlled Parallel-Group Study

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Least Squares Mean (SE)</th>
<th>95% CI</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxycodone 5 mg/ Ibuprofen 400 mg (n = 186)</td>
<td>13.3 (0.52)</td>
<td>12.3 to 14.4</td>
<td>P &lt; 0.001 vs oxycodone 5 mg or placebo; P = 0.012 vs ibuprofen 400 mg alone</td>
</tr>
<tr>
<td>Ibuprofen 400 mg (n = 186)</td>
<td>12.2 (0.52)</td>
<td>11.3 to 13.2</td>
<td>P &lt; 0.001 vs oxycodone 5 mg or placebo</td>
</tr>
<tr>
<td>Oxycodone 5 mg (n = 63)</td>
<td>4.3 (0.82)</td>
<td>2.7 to 5.9</td>
<td>P = 0.911 vs placebo</td>
</tr>
<tr>
<td>Placebo (n = 62)</td>
<td>4.2 (0.83)</td>
<td>2.5 to 5.8</td>
<td>-</td>
</tr>
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</table>
“DOC, I NEED SOMETHING STRONGER”

Oral administration of morphine versus ibuprofen to manage postfracture pain in children: a randomized trial

Naveen Poonai MD, Gina Bhullar BSc, Kangrui Lin MD, Adam Papini MD, David Mainprize BSc, Jocelyn Howard MD, John Teefy BSc, Michelle Bale BSc, Cindy Langford RN, Rodrick Lim MD, Larry Stitt MSc, Michael J. Rieder MD PhD, Samina Ali MD

morphine (0.5 mg/kg orally) or ibuprofen (10 mg/kg)
325mg Acetaminophen

5mg Hydrocodone
Good opioid patient

Bad opioid patient
Good opioid patient

Legitimate suffering
“real pain”
“needs surgery”

Bad opioid patient

Illegitimate suffering
drug seeking
addict
The immaculate prescription
VICODIN: THE BOLDFAced PILL

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Heidi Fleiss

Matthew Perry

Courtney Love

Kelly Osbourne

Darryl Strawberry

Ozzy Osbourne

PHOTOGRAPhS: CHARLEs ESHELMAN/GETTY IMAGES (FLEISS); PAUL JASIENSKI/GETTY IMAGES (FAVRE); JASON MERRIT/GETTY IMAGES (MCCAIN); JIM SPELLMAN/GETTY IMAGES (STRAWBERRY); TODD WILLIAMSON/WIREIMAGE (GORE); PATRICK McMULLAN (REMAINING)