The Centers of Excellence for Pain Education

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The Role of Opioids in the Treatment of Chronic Pain

Deputy Director
Division of Clinical Neuroscience and Behavioral Research
National Institute on Drug Abuse

NIH Pain Consortium
Institute of Medicine Report

- Affects 100 Million Americans
- Indirect/direct medical expenses
  US $560-$630 Billion/year
- #1 reason people out of work
Overdose Death Data Updates
Source: CDC

Prescription Opioid Overdose Deaths
- Total
- Female
- Male

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
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Heroin Overdose Deaths
- Total
- Female
- Male

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<td>2012</td>
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<td>2013</td>
<td>8,257</td>
<td>5,925</td>
<td>2,332</td>
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Source: CDC Wonder
For every 1 death there are...

- 10 treatment admissions for abuse
- 32 emergency dept visits for misuse or abuse
- 130 people who abuse or are dependent
- 825 nonmedical users

CDC, 2014
Americans in Chronic Pain!!

Opioid Treatment Admissions /10,000 Americans in Chronic Pain!!

8 7 6 5 4 3 2 1 0

Opioid Sales (Kg/10,000)

Opioid-Related Deaths/100,000

Opioid Treatment Admissions /10,000

Year


Sources: National Vital Statistics System, DEA Automation of Reports and Consolidated Orders System, SAMHSA TEDS
Choose between pain treatment VERSUS reduce prescription opioid abuse

PAIN!!

POA!!!
“Polarities”

Inhale
Take Risks
Conservative
Big Picture
Think
Opioids Good

Exhale
Use Caution
Progressive
Detail Focus
Act
Opioids Bad

Creativity or Standardization
It’s not one or the other.
It’s Both.
Improve Pain Treatment AND Reduce Prescription Opioid Abuse

PAIN!!!

POA!!!
Education on Pain in Medical Schools

Lina Mezei, B.S., and Beth Brianna Murinson, M.S., M.D., Ph.D. 2011

NIH Pain Consortium Centers of Excellence in Pain Education

John D. Loeser Center of Excellence in Pain Education at the University of Washington
The University of Pennsylvania Center of Excellence in Pain Education
Southern Illinois University Edwardsville/St. Louis University Center of Excellence in Pain Education
Rochester Area Collaborative Center of Excellence in Pain Education
University of New Mexico Center of Excellence in Pain Education
Harvard School of Dental Medicine Center of Excellence in Pain Education
University of Alabama at Birmingham Center of Excellence in Pain Education
University of California, San Francisco, Center of Excellence in Pain Education
Thomas Jefferson School of Medicine Headache Collaborative Center of Excellence in Pain Education
University of Pittsburgh Center of Excellence in Pain Education: Pain Challenges in Primary Care
University of Maryland Baltimore Center of Excellence in Pain Education
Johns Hopkins University Center of Excellence in Pain Education

NIH ICs Involved:
ORWH  NIA
OBSSR  NINR
NIDA  NICHD
NIDCR  NIAMS
NINDS  NCCAM
Overall Goal: Improve pain treatment through education

1) Develop and include pain education in the CoEPEs curriculum
2) Develop online pain education resource on the Pain Consortium website (and others)
3) Dissemination/Evaluation
“Edna”
Objective Structured Clinical Examination (OSCE). Standardized patients were consistent across groups and they were masked to whether students had been exposed to the module.

<table>
<thead>
<tr>
<th></th>
<th>Group 1 (n 28) (not exposed to CLBP module)</th>
<th>Group 2 (n 27) (exposed to CLBP module)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLBP OSCE score (mean, s.d.)</td>
<td>62 $\pm$ 8.65</td>
<td>79.5 $\pm$ 10.43</td>
<td>&lt; .001</td>
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<tr>
<td>Non CLBP OSCE score (mean, s.d.)</td>
<td>71 $\pm$ 4.72</td>
<td>70 $\pm$ 4.44</td>
<td>0.23</td>
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<tr>
<td>Palpitations</td>
<td>84.5 $\pm$ 13.1</td>
<td>86 $\pm$ 14.9</td>
<td>0.68</td>
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<td>Pediatric ear exam</td>
<td>76.8 $\pm$ 13.9</td>
<td>73.3 $\pm$ 12.8</td>
<td>0.22</td>
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<td>ACE inhibitor</td>
<td>90 $\pm$ 10.9</td>
<td>91.8 $\pm$ 8.3</td>
<td>0.48</td>
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<tr>
<td>Sinus infection</td>
<td>90.2 $\pm$ 9.4</td>
<td>93.5 $\pm$ 8.7</td>
<td>0.18</td>
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<tr>
<td>Anticipatory guidance</td>
<td>61.7 $\pm$ 20.5</td>
<td>66 $\pm$ 17.2</td>
<td>0.40</td>
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<tr>
<td>Adult abdominal pain</td>
<td>85 $\pm$ 15.3</td>
<td>84.8 $\pm$ 10.1</td>
<td>0.96</td>
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<tr>
<td>Pediatric abdominal pain</td>
<td>78.9 $\pm$ 12.9</td>
<td>69.8 $\pm$ 13.8</td>
<td>0.01</td>
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<tr>
<td>Hypertension treatment</td>
<td>59.3 $\pm$ 10.7</td>
<td>58.2 $\pm$ 11.0</td>
<td>0.71</td>
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<tr>
<td>Pediatric prescription writing</td>
<td>83 $\pm$ 12.6</td>
<td>76.8 $\pm$ 15.7</td>
<td>0.34</td>
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</tbody>
</table>

Weiner et al, 2014
Coming soon!
National Pain Strategy
A Comprehensive Population Health Level Strategy for Pain

Public Education
Professional Education
Population Research
Prevention, Care and Disparities
Services and Reimbursement
Debate about opioids!!
Or not....
Federal and nonfederal agencies should sponsor research to identify which types of pain, specific diseases, and patients are most likely to benefit and incur harm from opioids. Such studies could use a range of approaches and could include demographic, psychological, sociocultural, ecological, and biological characterizations of patients in combinations with clear and accepted definitions of chronic pain and well-characterized records for opioids and other pain medications.

Federal and nonfederal agencies should sponsor the development and evaluation of multidisciplinary pain interventions, including cost-benefit analyses and identification of barriers to dissemination.

Federal and nonfederal agencies should sponsor research to develop and validate research measurement tools for identification of patient risk and outcomes (including benefit and harm) related to long-term opioid use that can be adapted to clinical settings.

Electronic health record vendors and health systems should incorporate decision support for pain management and facilitate export of clinical data to be combined with data from other health systems to better identify patients who benefit from or are harmed by opioid use.

Federal and nonfederal agencies should sponsor research on risk identification and mitigation strategies, including drug monitoring, before widespread integration of these into clinical care. This research should also assess how policy initiatives affect patient/public health outcomes.

The National Institutes of Health or other federal agencies should sponsor conferences to promote harmonization of guidelines of professional organizations to facilitate...
Fighting prescription opioid abuse

PDMP

Public Education

Abuse Deterrent Formulations

“Smart” Pills

Provider Education

New Medications

Addiction Treatment

Biomarkers

Aftermarket Safety Studies

Review of Literature

Naloxone Rescue

Alternative Therapies
Fighting pain

- PDMP
- Biomarkers
- Aftermarket Safety Studies
- Review of Literature
- Naloxone Rescue
- Alternative Therapies
- Addiction Treatment
- New Medications
- “Smart” Pills
- Abuse Deterrent Formulations
- Provider Education
- Public Education
Fighting both!

PDMP
Public Education
Abuse Deterrent Formulations
“Smart” Pills
Provider Education
New Medications
Addiction Treatment
Biomarkers
Aftermarket Safety Studies
Review of Literature
Naloxone Rescue
Alternative Therapies
Reflections on the role of opioids in the treatment of chronic pain: a shared solution for prescription opioid abuse and pain

"The Secretary of the Department of Health and Human Services should develop a comprehensive, population health-level strategy for pain prevention, treatment, management, education, reimbursement, and research that includes specific goals, actions, time frames, and resources."
Public Education
Professional Education
Population Research
Prevention, Care and Disparities
Services and Reimbursement