OPIOID ABUSE AND CHRONIC PAIN, CUMBERLAND COUNTY, MAINE

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Acknowledgement

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The company convened an independent panel to review our research proposal.

At no time did the company influence data collection or analysis.
There was a rapid and sizeable increase in opioid misuse and addiction in Maine between 1998 and 2002.

Much of the misuse and addiction has been associated with pharmaceutical opioids.
Enrollment Criteria

- Illicitly used an opioid within the prior 30 days
  - If injector, evidence of injection stigmata
  - If non-injector, ability to identify pills

- ≥16 years old

- Able to provide informed consent; not intoxicated or impaired

- Resident of Cumberland County on April 1 (to avoid summer vacationers)
Community Assessment of Substance Abuse in Maine - CASUM

- Used street outreach and referrals from service providers to access 23 opioid abusers.
- Used respondent driven sampling to recruit 214 additional subjects.
- Interviews conducted in public places lasted 60-90 minutes.
Portland Market
Study Instrument

The questionnaire collected:
- Sociodemographic Information
- Health & Service Utilization
- Drug Use History and Risk Behaviors
- Perceptions about Local Drug Market
- Addiction Severity
- Chronic Pain
- Sexual Behaviors
- HIV & Hepatitis Knowledge

After the interview, answers to knowledge questions reviewed and information on preventing opioid overdose was provided.
Sample Characteristics (N = 237)

Recruitment period: July 8 - September 20, 2002

168 were men (71%); 208 were white (88%).

Age: Median = 27; Mode = 18; Range 16–52.

159 were high school graduates (67%).

200 lived in Portland (85%).

114 reported being homeless (48%).

Median monthly income was $713; median drug expenditure was $250; mode = $200
Current Drug Use

Illicit opioids used in the 30 days prior to the interview:
- 106 used heroin;
- 187 use OxyContin;
- 166 used other short-acting pharmaceutical opiates;
- 61 used methadone.

222 used other drugs illicitly.

135 used alcohol to intoxication.
**Questions from the Brief Pain Inventory**

- **B6.** Are you experiencing recurrent pain that interferes with your daily functioning? ☐ Yes  ☐ No  ☐ DK/Unsure  
  If "No," go to B12, Page 7  
  a. How long have you had the pain?  
     - Months:  
     - Years:  

- **B7.** On a scale from 1 to 10, how has your pain interfered with your daily activities?  
  DOESN'T INTERFERE  ................................................. COMPLETELY INTERFERES  
  a. General Activity?  
     - 1  2  3  4  5  6  7  8  9  10  
     - Score:  
  b. Mood?  
     - 1  2  3  4  5  6  7  8  9  10  
     - Score:  
  c. Walking Ability?  
     - 1  2  3  4  5  6  7  8  9  10  
     - Score:  
  d. Normal Work Routine?  
     - 1  2  3  4  5  6  7  8  9  10  
     - Score:  

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*CASUM PROJECT (FINAL) 6/20/02*
B7 (cont’d). On a scale from 1 to 10, how has your pain interfered with your daily....

**DOESN’T INTERFERE** -------------------------------- **COMPLETELY INTERFERES**

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<th>e. Relations With Other People?</th>
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<th>f. Sleep?</th>
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<th>g. Enjoyment of Life?</th>
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<th>h. Ability to Concentrate?</th>
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<th>i. Appetite?</th>
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**NO PAIN..........................................................WORST PAIN IMAGINABLE**

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<th>j. What level of pain do you think you could function with on a daily basis?</th>
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B8. Mark the number that best describes your pain at its **worst during the last month.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|○ |○ |○ |○ |○ |○ |○ |○ |○ |○  |

B9. Mark the number that best describes your pain at its **least during the last month.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|○ |○ |○ |○ |○ |○ |○ |○ |○ |○  |

B10. Mark the number that best describes your pain on **average during the last month.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|○ |○ |○ |○ |○ |○ |○ |○ |○ |○  |

B11. Mark the number that best describes your pain as it is **right now.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|○ |○ |○ |○ |○ |○ |○ |○ |○ |○  |
Results on Chronic Pain

98 of 237 (41%) of study participants reported chronic pain on the BPI.

Mean duration 5.2 years

Median scores:
- Interference with daily living – 6.0
- Daily intensity of pain – 4.5

Sex differences
- Similar level of intensity;
- men reported less interference with daily living -- 5.0 for men, 7.25 for women.
Duration of Chronic Pain and Opioid Abuse

Data available from 90 of 98 chronic pain suffers to assess which occurred first.

- For 70 (78%), initiation of opioid abuse preceded chronic pain.
- For 17 (19%) chronic pain preceded initiation of opioid abuse.
- Only 3 individuals reported that initiation of opioid abuse and chronic occurred in the same year.
Co-occurring Chronic Pain and Opioid Abuse – Impact on Care

- Individuals with co-occurrence were more likely than those with opioid abuse only to have a regular physician ($\chi^2=6.84$, $p=0.009$).

- Individuals with co-occurrence were more likely to report difficulty entering substance abuse treatment ($\chi^2=7.03; p=0.008$).

- Individuals with co-occurrence were more likely to report recent attempted suicide ($\chi^2=7.11$, $p=0.008$).
Addiction Severity and Chronic Pain

Addiction Severity Index is a standard, internationally validated measure of addiction with seven scales including one for medical problems.

In our sample, more than half of the variance in the ASI medical domain could be attributed to chronic pain.

ASI medical scores were correlated with both interference and intensity scales on the BPI.
Major Conclusions – and Questions for Further Study

1. Abusers of opioids often experience chronic pain that interferes with daily life.

2. For most of these individuals, chronic pain began after opioid abuse – is this a generalizeable finding?

3. Much of the medical problems associated with addiction may be related to chronic pain – if properly medicated, would addiction disappear?

4. Individuals with chronic pain have difficulties entering substance abuse treatment – does the co-occurrence make treatment providers more likely to refuse care?
Limitations of the Study

- Predominantly urban population that may not be representative of illicit opiate use in Maine.
- Self-reported data are subject to inherent problems such as faulty/inaccurate recall and social desirability phenomena.
- One-time-only snapshot of population.
Anthony Givens, Alison Phinney, Nabarun Dasgupta, Lauretta Grau, Robert Heimer, Kevin Irwin, Mark Kinzly, Dan Sundquist & Bernadette Thomas