

## **Pain Management in the Chemically Dependent Patient**

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### **Objectives**

- 1. Describe the physiologic link between pain and addiction.
- 2. Differentiate between abuse, addiction, physical dependence, and tolerance.
- 3. List treatment strategies for managing pain in the patient with addictive disease.

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### **Addiction**

“Addiction is a primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is characterized by behaviors that include one or more of the following:..”

AAPM, APS, AAAM Consensus  
2001

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## Phenomenology of Addiction

Addicted individuals comprise a group of patients whose pain is quite likely to be mismanaged and/or under managed.

- Chronic, relapsing condition
- Psychiatric Morbidities
- Medical Morbidities
- Familial disorder (genetic tendencies)
- Primary coping response

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## When I grow up I wanna be a....

Nurse	Lawyer	A Mommy	Football player	Doctor
Computer engineer	Movie Star	<u>Addict ??</u>	Teacher	A Daddy
Fireman	Rich and Famous	Business Owner	Radio Talk Show Host	President of the US

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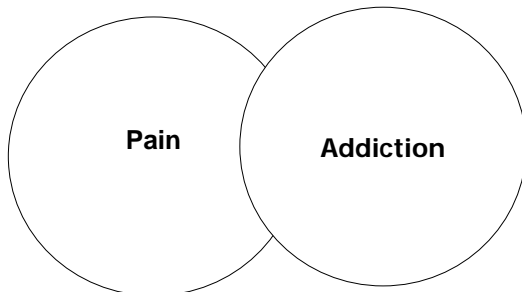
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## Pain and Addiction are not unrelated phenomenon




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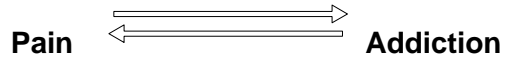
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**The presence of both affect the expression of the other.....”**




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**ASPMN Position Statement  
September, 2002**

Patients with addictive disease have the right to be treated with respect and to receive the same quality of pain management as all other patients.

Providing this care addresses the potential for increased drug use or relapse associated with unrelieved pain.

Nurses are in an ideal position to advocate and intervene for these patients across all treatment settings.

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**Models of Addiction**

Moral	Criminal	Disease
Moral weakness lack of will power	Bad or evil character	Acquired brain disease
Increase moral strength/fortitude	Rehabilitation	Normalize brain disruption
Religious conversion	Incarceration	Pharmacotherapy, cognitive behavioral therapy

McCaffrey & Pasero (1999) pg 431

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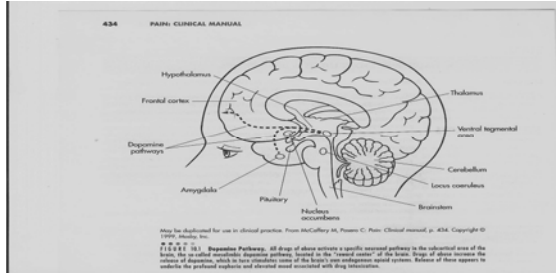
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## Neurobiology of Addiction



McCaffery & Pasero Pain Clinical Manual pg 434

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## Compton (1994) & Compton (1998)

- Pain and substance abuse cause endogenous opioid activation in the subcortical structures of the brain.
  
- This may alter pain perception.
  - Increased pain perception
  - Decreased pain tolerance
  
- Neurophysiological adaptation that occurs in opioid addiction.

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## Addiction and Psychiatric Disease

Disorder	% Alcohol	% Drug Abuse
Schizophrenia	33.7	27.5
Antisocial Personality	<b>73.6</b>	<b>42.0</b>
Anxiety Disorder	17.9	11.9
OCD	24.0	18.4
Bipolar	<b>43.6</b>	<b>40.7</b>
Depression	16.5	18.0

Reiger, et al (1990)

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## Physical Dependence

- **neuroadaptive state** resulting from chronic drug administration.
- abrupt cessation of the drug, or administration of an antagonist to the drug results in a **drug-specific** withdrawal syndrome.
- **Expected physiological occurrence** in all individuals in the presence of continuous use of certain drugs, such as opioid analgesics

McCaffrey & Pasero (1999) pg 429.

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## Tolerance

- **Neuroadaptive state** resulting from chronic drug administration.
- **Diminution of therapeutic drug effect** over time.
- Requires increasing amounts of the medication to achieve the same **therapeutic effect** obtained with original dose.
- **Expected physiologic occurrence** in the presence of continuous drug administration.

McCaffrey & Pasero (1999) pg 429.

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## Pseudoaddiction or Therapeutic Dependence

Direct consequence of **inadequate pain management**.

Clinical interaction-describes patient behavior that may occur when **pain is under treated**.

Leads to behaviors such as

'drug seeking'  
clock-watching  
deception in an effort to **obtain relief of pain**

- Behaviors **cease** when adequate pain relief provided.

Portenoy (1990)

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### Miller & Gold 1993

- The presence of addiction [**regardless of the drug (s) abused**] will increase/intensify the experience of pain.
- Activation of the SNS is caused by:
  - Pain
  - Drug abuse
  - Opioid withdrawal

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### Compton (1994)

- Genetic propensities
- Rapid metabolism of opioids via CP 450
- *Theoretically* this would/should:
  - ↓ Risk for addiction due to less 'brain reward'
  - ↑ Increases risk for under treatment of pain

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### Addiction Behaviors (The 4 C's)

- Loss of **control** over use (**compulsive**).
- Continuation of use despite adverse **consequences**.
- Obsession or preoccupation with obtaining and using the substance.
- Continued **craving** for the drug and the need to use the drug for effects other than pain relief.
- Diversion

AAPM, APS, AAAM Consensus  
2001

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## Addiction: State of the Science

No scientific evidence yet exists to support the assumption/claims that providing opioid analgesia to patients with addictive disease in any way worsens the addiction or that the withholding of opioid analgesia increases the likelihood of recovery from addictive disease. Therefore, health care **professionals** must acknowledge their biases concerning addiction prior to caring for patients with addictive disease

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## Practice Implications

- Opioid induced tolerance and hyperalgesia may reflect two sides of the same coin at the **cellular level**
  - CCK receptors
  - NMDA receptors
- Caution: Mao (2002; 2006) **clinical features** are distinctly different
  - Hyperalgesia: increased sensitivity to pain
  - Tolerance: decreased sensitivity to opioids

DuPen, Shen, & Ersek (2007)

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## Pain vs. Addiction

Pain Patient	Addicted Patient
+ control over medication use	(-) control over medication use
+ quality of life	(-) quality of life
Awareness and dislike of side effects	<b>Requests increases despite side effects **</b>
Concerned about medical problems	Denial regarding medical problems
Adheres to treatment plan	<b>Does not adhere to treatment plan</b>
Left over medication	Never any leftovers

Cohen et al (2002)

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**Assess/screen for addiction:  
the 4 'A's of Pain Management**

- Analgesia
- Activities of daily living
- Adverse events
- Aberrant drug-taking behaviors

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**Goals of acute pain management in  
opioid dependent patients**

1. Identify populations at risk.
2. Prevent withdrawal symptoms and complications.
3. Symptomatically treat psychological affective disorders (anxiety).
4. Provide effective analgesic treatment (pain relief) in the acute phase.
5. Assist with rehabilitation process to an acceptable and suitable level of opioid maintenance therapy.

Mehta & Langford (2006)

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**General Guidelines  
ASPMN Position Statement (2002)**

1. Identify and openly discuss patient's addictions.
  - Drug (s) of abuse.
  - Current, recent, or remote use?
  - Duration of addictive disease.

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**General Guidelines  
ASPMN Position Statement (2002)**

- 2. Accept and act on patient's pain report
- 3. Develop and establish a individualized pain treatment plan.
- 4. Consult a pain and/or addiction specialist to collaborate with the above plan.
- 5. Psychiatric consultation is crucial.

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**General Guidelines  
ASPMN Position Statement (2002)**

**6. Do not** give agonist-antagonists!

- High risk of inducing withdrawal
- High risk/probability for unrelieved pain
- High risk/probability of encouraging inappropriate 'drug-seeking' in an attempt to relieve pain

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**General Guidelines  
ASPMN Position Statement (2002)**

- 7. Consult a pain and/or addiction specialist to collaborate with the above plan.
- 8. Consult psychiatric services immediately while in patient.
- 9. Assess the individual's motivation to engage in addiction rehab

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## Opioid Detoxification

1. Out patient basis.
2. Uncomfortable but not life threatening.\*\*
3. Treat ANS symptoms of withdrawal:
  - Clonidine q 4 – 6 hrs ATC \*\*\*\*\* Hypotension
  - Does not treat insomnia or drug craving
4. Substitute for abused opioid.
  - Methadone
  - 30-120 day periods
  - Duration of action- long and variable

Fultz & Senay (1975)

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## Summary

" .... in the chronic pain patient taking long-term opioids, physical dependence and tolerance should be expected, but the **maladaptive behavior changes associated with addiction are not expected.**

Thus, it is the presence of these behaviors in the chronic pain patient that is far more important in diagnosing addiction".

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## Summary

- pain relief is the goal [and right] of **all** patients with pain regardless of the current or past history of addiction.
- primary objective therefore is the **relief of pain.**
- Comfort                      HCP Trust                      Increased adherence  
    ⇨                                      ⇨
- Detoxification **does not** treat the disease of addiction.
- **Never** appropriate to initiate detoxification treatment procedures when patient is experiencing pain.

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## Summary

- To withhold appropriate pain assessment and/or pain relief in a patient with addictive disease is:
  - **Discrimination**
  - **Double standard of practice/care**
  - **Unethical**
- Health care *professionals* must acknowledge biases prior to caring for patients with addictive disease

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## Questions and Reference List

- Please send email request to:

[bazenp@upstate.edu](mailto:bazenp@upstate.edu)

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