

# Pain Management – Opioids for Chronic Pain

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# Disclosures

- \* Owner/Director – Comprehensive Pain Management of Central Connecticut, LLC (offices in Plainville, Bristol, and Southington, CT)
- \* AAAHC accredited office based practice
- \* President - CT Pain Society
- \* Carrier Advisor for Pain Management -Medicare
- \* Active member of the American Society of Interventional Pain Physicians (ASIPP, ASA)
- \* No outside funding or grants – unpaid consultant

# Agenda

- \* Overview
- \* Case Review
- \* Interventional (Integrational) Pain Management
- \* Opioids
- \* Management of Patients on Chronic Opioids
- \* Conclusions/questions

# Definition of Pain

- \* Poena (Latin)
- \* “An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage”
  - \* International Association for the Study of Pain (IASP)

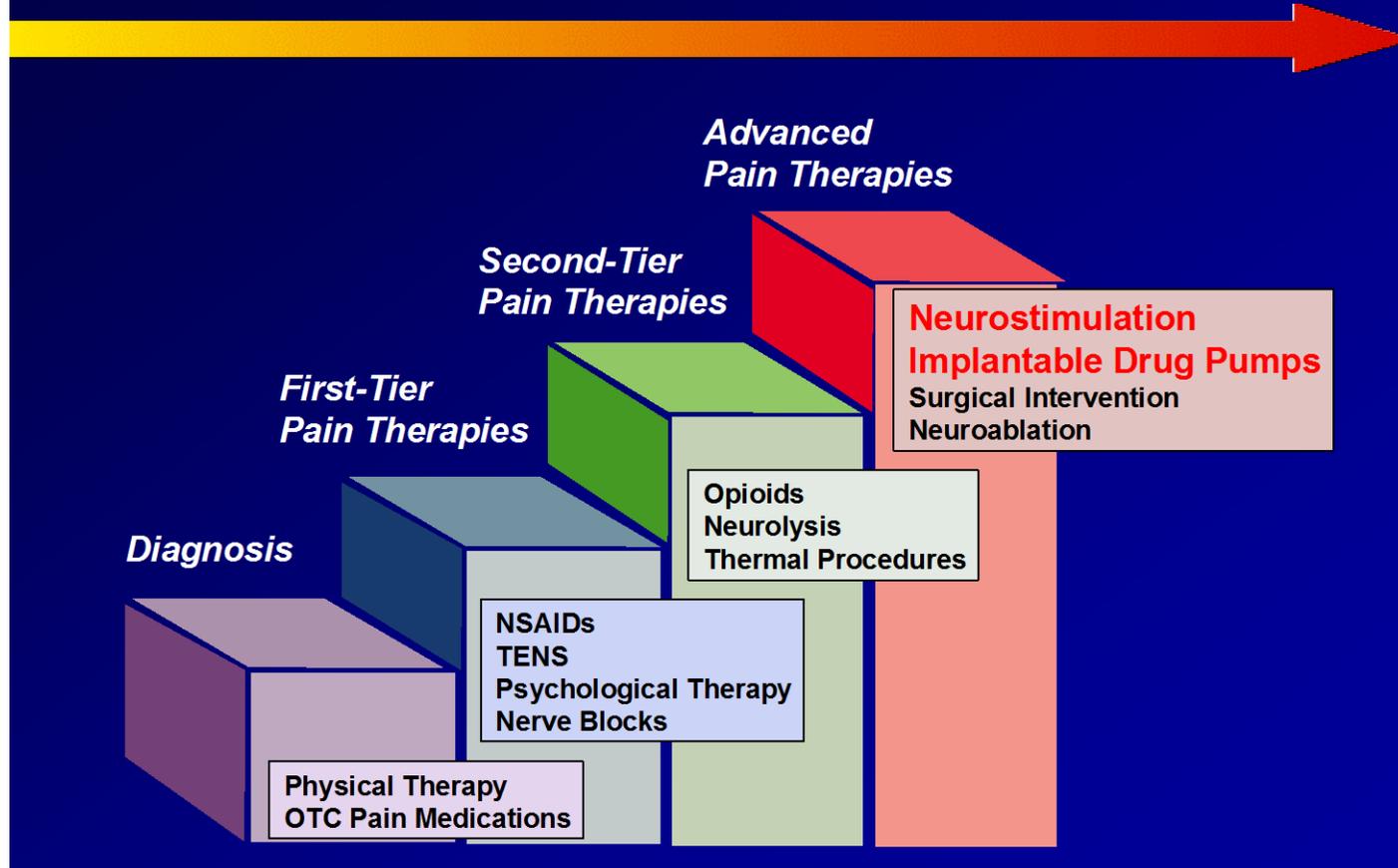
# Interventional Pain Management

Interventional Pain Management is the discipline of medicine devoted to the diagnosis and treatment of pain-related disorders principally with the application of interventional techniques in managing subacute, chronic, persistent, and intractable pain, independently or in conjunction with other modalities of treatment.

NUCC definition

2002/2003

# Chronic Pain Treatment Continuum



# Case Review

- \* 43 year old male - labor intensive work
- \* Injured in 2007 at work
- \* Immediate back pain, no leg pain
- \* Went to Occ. Health – given vicodin/2weeks & anti-inflammatory & sent for PT
- \* After one month, no better with PT. Sent to ortho (shoulder specialist)
- \* MRI obtained – “mild L4-5 and mild L5-S1disc bulging

# Case - continued

- \* Orthopedist orders “Series of 3 epidural steroid injections.”
- \* Set up in the office to be performed by an anesthesiologist (NO FLUOROSCOPY)
- \* No relief with any of the injections, yet series of 3 carried out. The patient noted no difference in his pain.
- \* Patient followed up with his orthopedist (shoulder specialist) and was started on oxycontin 10mg twice a day. Also, soma four times a day.

# Take Home

- \* “Bulging discs” generally do NOT cause PAIN

# Case 1-continued

- \* Patient care transferred for “pain management.”
- \* One year later (still out of work), patient taking: Oxycontin 80mg three times a day, percocet 10mg/325mg - 6-8 a day, soma four times a day.

# Case 1-continued

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# Mechanism of Opioids

- \* Analgesic effect by inhibiting nociceptive signals within the CNS and activating the descending inhibitory system
- \* Primarily Mu receptors
  - found throughout the nervous system – centrally and peripherally
- \* Secondary receptors activated at higher doses --> side effects

# Side Effects of Opioids

- \* Opioids influence hypothalamic-pituitary-adrenal axis and the hypothalamic-pituitary-gonadal axis
- \* Immune modulation
- \* Endocrine dysfunction
- \* Depression
- \* Hyperalgesia
- \* GI- constipation
- \* Urinary retention
- \* Itching
- \* Sedation
- \* Respiratory Depression
- \* Euphoria

# Opioids (continued)

## Chronic Non-Malignant Pain ???

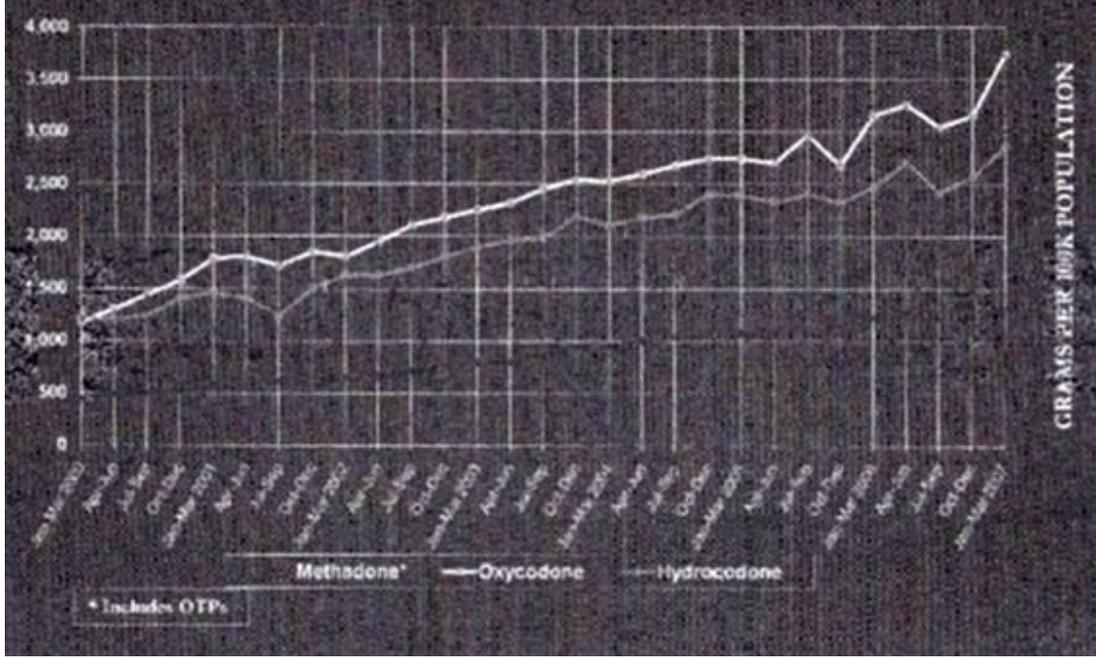
- \* *Studies support significant analgesic efficacy of opioids (morphine equivalent of 180 mg for 32 weeks)*
- \* *Evidence of their effect on functioning is mixed*
- \* *No evidence to support higher doses of opioids for treatment of pain chronically*

# Opioid Painkillers

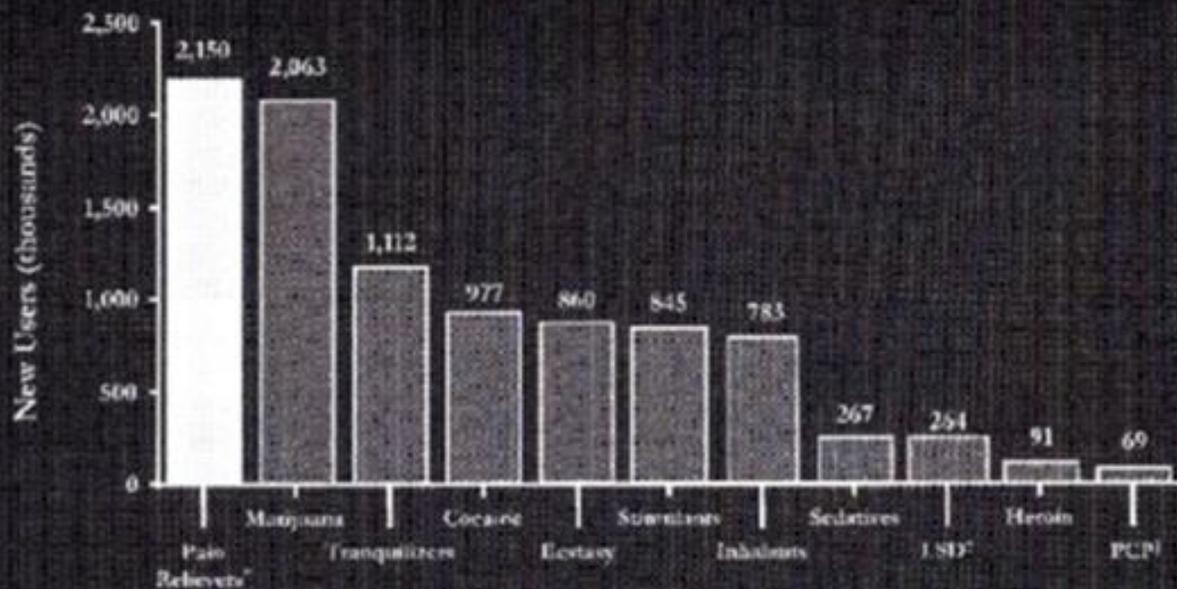
- \* Today the US consumes most of the world's supply of opioid painkillers.
- \* By 2010 enough opioid painkillers were prescribed to medicate every American adult around the clock for a month.
- \* About 1 in 20 people in the US 12 yrs. or older reported using opioid painkillers for non-medical purposes in 2010. This is more than the number of Americans abusing cocaine, heroin, hallucinogens and inhalants combined.

# Trend data: Distribution of prescription opioids, U.S., 2000–2007

Source: DEA, ARCOS system, 2007



## New Illicit Drug Use United States, 2006



\*533,000 new non-medical users of oxycodone aged ≥ 12 years. Past year initiates for specific illicit drugs among people aged ≥ 12 years.  
LSD, lysergic acid diethylamide; PCP, phencyclidine.

Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2006 *National Survey on Drug Use and Health*. Department of Health and Human Services, Publication No. SMA 07-4293, 2007.

# Frequency in General US Population

- \* 23 Million Americans suffer from substance abuse disorders.

(Source: Substance Abuse: The Nation's Number One Health Problem. Brander University Schneider Institute Health Policy 2001)

- \* In 2011, 1.8 Million People Abused or Were Dependent on Prescription Opioids.

(US Dept. Health Services, SAMHSA 3/8/13)

# Frequency in General Global Population

## Extent of Illicit Opioid use and Health Consequences

2010:

Estimated at 0.6-0.8 percent of the population aged 15-64  
( between 26.4 million and 36 million opioid users)

Note: Global figures are not available for non-medical use of prescription drugs

(Recent statistics and trend compliances of Illicit Drug Markets.

[http://www.unodc.org/documents/wdr/WDR\\_2010/2.0\\_Drug\\_statistics\\_and\\_Trends.pdf](http://www.unodc.org/documents/wdr/WDR_2010/2.0_Drug_statistics_and_Trends.pdf))

- \* In 2010, 12 million Americans (age 12y or older) reported non-medical use of “prescription painkillers”
- \* In 2009, Marked increase from past years. Nearly half a million Emergency Department visits.
- \* Quantity of pain pills sold to pharmacies, hospitals, doctor’s offices were four times larger in 2010 than in 1999.
- \* In 2008/2009 non-medical use of painkillers ranged from 1 in 12 (age 12 years or older)
  - \* States with higher sales per person and more non-medical use of prescription painkillers tend to have more deaths from drug overdoses.
  - \* Prescription pain killer overdoses killed nearly 15,000 people in the U.S. (2008) – 3 times more than in 1999

# Costs Related to Substance Use Disorders

## USA:

**\$3.3 Trillion/yr. Spent by Federal and State Governments for Healthcare and Criminal Justice Industries ( A large portion being spent on the decreased productivity and absenteeism within industries.)**

(source: Nat'l Ctr. On Addiction and Substance Abuse at Columbia Univ. "Shoveling. Up II. The Impact on Fed/State Government)

## **Global/International Basic Data:**

The 2005 UNODC World drug Report estimates that World Wide drug trade at \$320 Billion

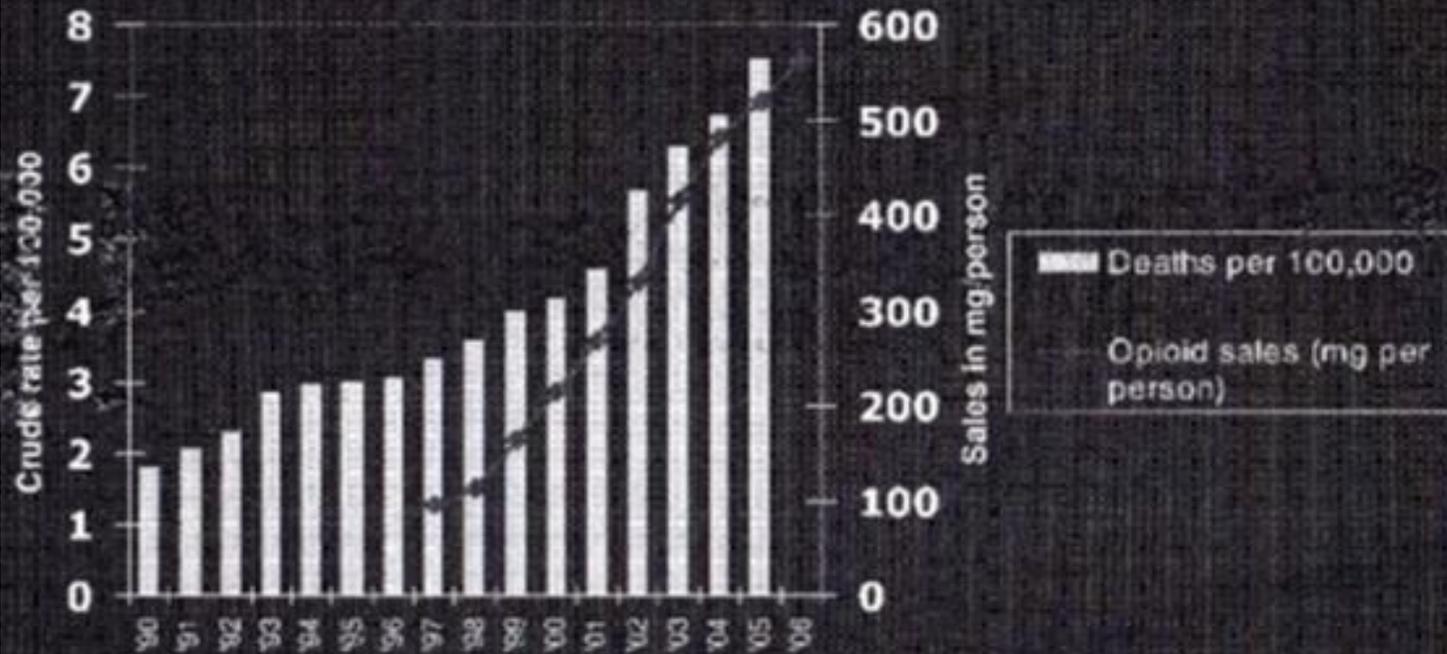
(source: Teromy Haken; "Transnational crime in the developing world")

UN estimated Drugs and Transnational crime approximately 0.4% to 0.6% of the global GDP

(source: UN office Drugs and Crime "Estimating Illicit Financial Flow Resulting from Drug Trafficking and other international organized crime Oct. 2011 p.7)

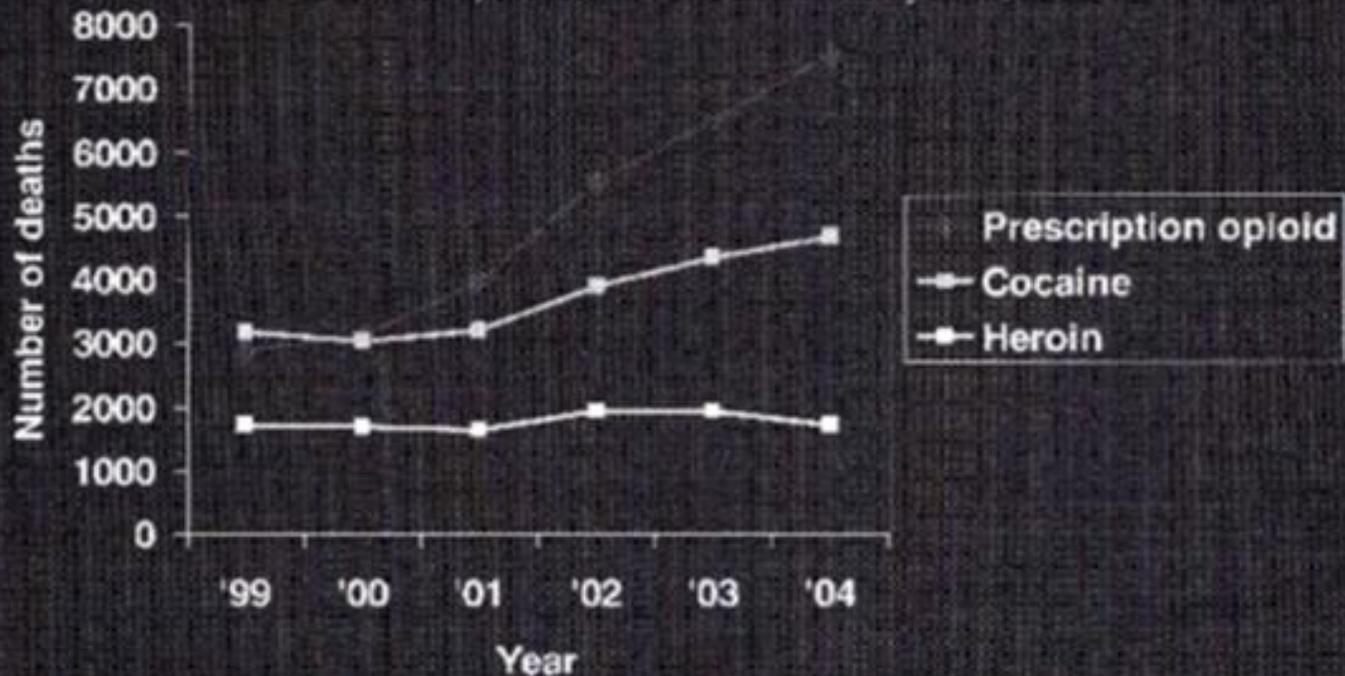
## Deaths per 100,000 related to unintentional overdose and annual sales of prescription opioids by year, 1990 - 2006

Source: Paulozzi, CDC, Congressional testimony, 2007



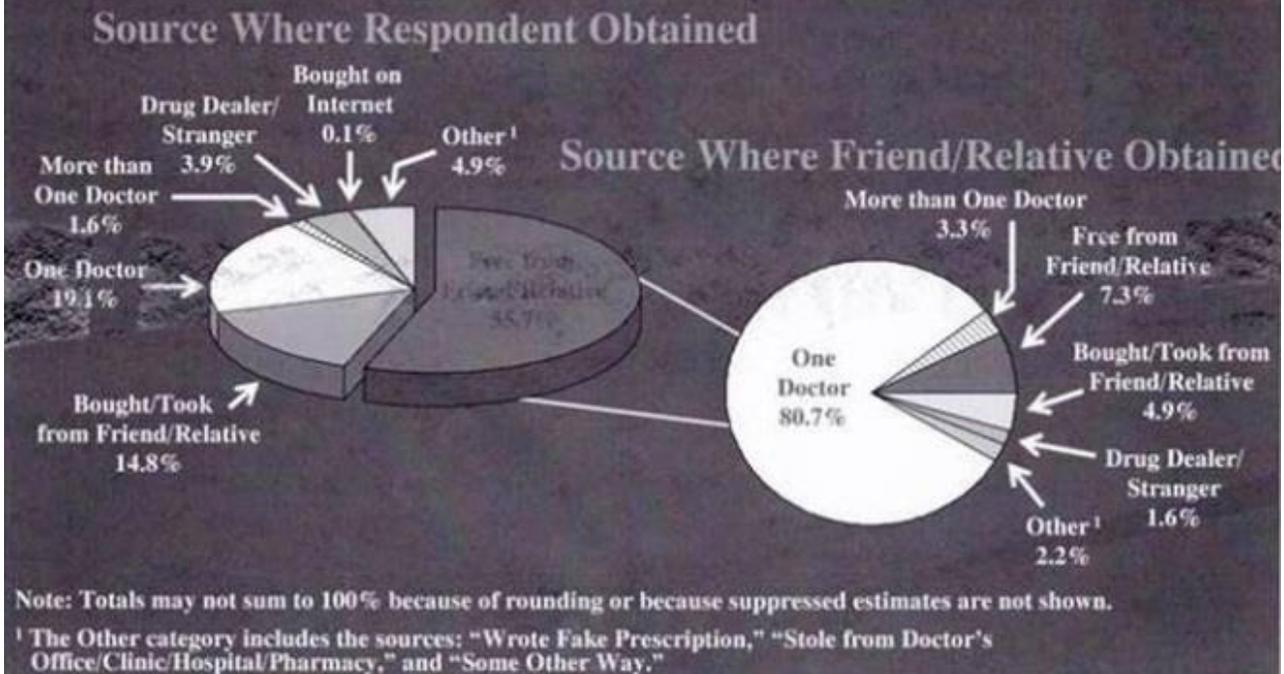
## Unintentional drug overdose deaths are rising faster for prescription opioids than for illicit drugs

Source: CDC, National Vital Statistics System, 2006



# Where Pain Relievers Were Obtained

## Most Recent Nonmedical Use among Past Year Users Aged 12 or Older: 2006



# Why the Epidemic?

The answer is due to the following:

- \* A lack of evidence-based training knowledge regarding opioid dependency, as well as lack of understanding/knowledge of addiction disorders as a whole.
- \* A lack of interest to treat opioid dependent patients because of the negative stigma and negative experiences.
- \* A lack of understanding about the chronic disease paradigm of addiction as compared to chronic diseases like diabetes mellitus or hypertension.

# Gauging the Risk of Opioid Addiction

- \* Genetics and Environment

- \* Twin studies suggest that the degree of heritability of addictive disorders ranges between 40% and 70% depending on the substance being evaluated
- \* Risk appears to be higher for first degree relatives as opposed to more distant relatives

- \* Most Important Indicator

- \* Personal history of substance abuse is strongest risk factor for future abuse

# Other predicting factors

- \* Family history of substance abuse
- \* Depression
- \* Other psychological comorbidities
- \* Age? 20 to 40 years old higher risk
- \* History of preadolescent sexual abuse in women (?)

# Elements of Patient's Care – musts for documentation

- \* 1. Assessment
- \* 2. Education
- \* 3. Treatment agreement (use agreement) and informed consent
- \* 4. Action plans
- \* 5. Outcomes (expectations/goals)
- \* 6. Monitoring (including PMP)

# Monitoring – How and When?

- urine
- blood
- saliva

Prescription Monitoring Website

Frequency of Office Visits – face to face with a Provider

Random Pill Counts









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