Disclosure

I do not have any relevant financial relationships with any company/organization to disclose with respect to this Annual Session continuing education courses.
C. Edward Felker, M.D.
1950-1997
Management of the Chemically Dependent Patient

William T. Kane, DDS, MBA, FAGD, FACD
Dexter, Missouri
October 18, 2012
ADA Annual Session
San Francisco, California
Dexter, Missouri
10 WORST METH STATES

SOURCE: EL PASO INTEL. CTR.

8. Iowa
5. Illinois
4. Oklahoma
1. Missouri
3. Indiana
2. Kentucky
7. North Carolina
9. Mississippi
10. Arkansas
William T. Kane, DDS, MBA, PC
Drug abuse? Not in my practice.

“Why should I get involved?”

As a health care professional, you are in an outstanding position to help combat the epidemic of drug abuse. Drug abuse is a serious health problem that affects people of all ages and walks of life. As a health care professional, you have an important role to play in helping to prevent drug abuse.

“My patients aren’t like that!”

There are many misconceptions about drug abuse. Many people believe that drug abuse only happens to other people, not to them. However, drug abuse can happen to anyone. It is important to recognize the signs and symptoms of drug abuse and to take action to prevent it.

“Not what can I do?”

There are many things you can do to help prevent drug abuse. One of the most important things you can do is to talk to your patients about the risks of drug abuse. By discussing the risks of drug abuse with your patients, you can help them to understand the importance of preventing drug abuse.

DRUG ABUSE... be part of the solution.
Partnership for a Drug-Free America
This is your brain,

this is drugs,

this is your brain on drugs.

Any questions?

Partnership For A Drug-Free America
Did he come to you for his uppers...

or your downers?

DRUG ABUSE...be part of the solution.

Partnership for a Drug-Free America
Substance Abuse
Prevalence and Cost

• 10-33% Americans
• 8 million are alcohol dependent
  – 5.6 million alcohol abuse
  – 16 million use illicit drugs
  – 46.5 million smokers
• Addiction costs U.S. economy approximately $600 billion annually
Prevalence...

“The prevalence of substance abuse is so high that every health care provider in the U.S. sees patients either at risk themselves or experiencing negative effects of substance use by a friend, family member of co-worker.”

Madden, TE: CDA Journal, Vol 26: No 2: Feb 2008 (119-121)
What You Can Take Home and Use

• Discuss dentistry’s role in prescription drug abuse
• Understand the disease of chemical dependency/addictive diseases
• Identify patients with chemical dependencies
• Discuss treatment of patients in the active disease state
• Discuss treatment of patients in recovery or medically assisted therapy (MAT)
Using dentists as dope dealers

Kenny Morrison once served dinner to the Hollywood stars. But he soon lost it all after getting hooked on pain medication. He didn't buy his drugs on a street corner or get them from a dope dealer. He got them mostly from dentists he had never met. "My body craved it, and I lost everything," he says. full story
Program on Opioid Risk Management March 2010
“Prevention of prescription opioid abuse: The role of the dentist”

Richard C. Denisco, George A. Kenna, Michael G. O’Neil, Ronald J. Kulich, Paul A. Moore, William T. Kane, Noshir R. Mehta, Elliot V. Hersh, and Nathaniel P. Katz

July 2011
Prescription Drug Abuse Crisis

2011

Executive Office of
The President of the United States

Areas of Focus:

- Education/training
- Prescription Monitoring
- Medication disposal
- Enforcement
• Projected funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) and American Academy of Addiction Psychiatrists (AAAP)

• Provides training and education on the safe and effective prescription of opioid medication for the treatment of pain and/or opioid addiction
Dentists Prescribe 12% of all Opioids

• Dentists need to examine our prescribing habits
A Moment to Establish Terminology*

*Gilson – 2010 Clij Pain Vol26, No.1
Chemical Dependency

- Substance Use Disorder
  - Abuse
  - Dependence
- Alcoholism
- Addictive Diseases
  - Drug Addiction
  - Nicotine Addiction
- Chronic Pain Syndromes
Behavioral Addictions

- Gambling
- Eating Disorders
- Sexual Compulsivity
- Problematic Internet Use
- Compulsive Buying Disorder
- Social Networking Addiction
- Co-Dependency
Addiction is Like Other Diseases…

• It is preventable
• It is treatable
• It changes biology
• If untreated, it can last a life time…
Drug Addiction...

is a chronic disease with relapse rates similar to those of hypertension, diabetes, and asthma.

It can be fatal if not adequately treated.
Addiction is a Brain Disease

Characterized by:

• Compulsive behavior
• Continued abuse of drugs despite negative consequences
• Persistent change in the brain’s structure and function

ASAM, August 11, 2011: NIDA
Neurobiology of Addiction and
The Science of Addiction
Normal Pleasure Response

Increased Dopamine Release

Pleasure/Motivation Response
Brain Reward Pathway

Psychoactive Addictive Drugs Act on this Pathway
Brain Reward Pathway

neocortex
basal ganglia
amygdala
substantia nigra
hypothalamus
hippocampus
locus ceruleus
Drug

Dopamine surge!!!
Identify Patients as:

- **Use (Low Risk)**
- **Misuse (At Risk)**
- **Abuse (Problem)**
- **Addiction**

*Non-users*

What's happening in the brain?
Definitions

• Addiction is a medical disorder with a complex etiology, multiple manifestations and a varied clinical course.*

• Addiction coopts the brain’s neuronal circuits necessary for insight, reward, motivation, and social behaviors.**

ASAM Definition

- Addiction is a primary, chronic, neurobiologic disease with genetic, psychosocial, and environmental factors.

- It is characterized by one or more of the following:
  - impaired control over drug use
  - compulsive use
  - continued use despite harm
  - craving

Chemicals

- Alcohol
- Amphetamines
- Caffeine
- Cocaine
- Nicotine
- Designer Drugs
- Disassociatives
- Inhalants
- Hallucinogens
- Marijuana
- Opiates
- Sedatives/Hypnotics/Tranquilizers
- Anabolic-Androgenic Steroids
Viceroy Filter Cigarettes

As your Dentist, I would recommend Viceroy.
A Reminder

- Michael Glick, D.M.D, editor of the Journal of the American Dental Association, challenged the profession stating that not discussing smoking and tobacco cessation with all our patients who use these products is not an option.

Patient Categories

• Active disease: ongoing use/abuse
  - "pseudo addiction"
  - chronic pain syndromes

• Abstinence: recovery via medically assisted therapy (Disulfram, Naltrexone, Methadone, etc.)

• Abstinence: drug-free recovery
Risk Factors

• Genetics
• Gender
• Mental Illness/Condition
• Peer Pressure
• Healthcare Professionals
• Socioeconomic Status

• Family Behavior
• Loneliness
• Nature of the substance
• Age when substance was first consumed
• Stress

Addiction is an “equal opportunity” disease.
The Diagnosis of Addiction

According to DSM IV-TR

1. Tolerance
2. Withdrawal
3. Used more and longer than planned
4. Unsuccessful attempts to quit or control use
5. Excessive time spent obtaining, using, or recovering from use
6. Important activities given up
7. Continued use despite adverse consequences

*Individual must have at least three of these seven characteristics
Addiction

Neurobiology of Behavior Gone Awry*

Characteristics of addiction:
• Mental mismanagement
• Denial
• Terminal uniqueness
• Isolation

Another Definition of the Disease

“Alcoholism/addiction is a disease, the very nature of which renders the victim incapable of recognizing the severity of the symptoms, the progression of the disease or of accepting any ordinary offers of help.”

- Father Vernon Johnson
DENIAL
It's not just a river in Egypt.

\o/MotivatedPhotos.com
The Transition from Use to Recovery

• Usually involves some sort of intervention?
• Then, appropriate treatment
• Transitions the patient into the road to recovery
What is Treatment?

- People don’t get better without changing*
- Ranges from A to Z
- DIY treatment
- Minnesota Model
- Medically Assisted drug therapy
- Mutual help organizations (AA, CA, NA, 12 Step Programs, faith based programs)

What is Recovery?

- A complex process…requires intensive, continuous personal effort involving abstinence and series of changes to maintain sobriety*
- More than just abstinence
- “Cured”, “former”, “recovered”, and “ex” are not appropriate
- Rate of relapse is inversely related to the duration of recovery**

Medical Marijuana?
Oral Systemic Link?
Heath History & Patient Interview

“Red Flags”
- suspicious or alleged drug allergies
- multiple organ systems effected by alcohol and drug abuse
- greater interest in analgesic prescriptions and anxiolyis than participation in treatment decisions

Note: potential of patient under reporting….ask about tobacco use, alcohol use
Heath History & Patient Interview

• Denial or anger when questioned
• Necessity of empathetic office & professional staff
• Confidentiality
• Practitioner’s knowledge and perception of chemical dependency/addictive diseases
Oral Health Status of Patients in Active Disease

- Related to severity & duration of the disease
- Seek emergency care
- Neglect, poor oral hygiene
- Generalized periodontal disease
- Bruxism and asymptomatic swelling
- Oral cancer
- Craniofacial trauma
- Delayed wound healing
Patients In Active Disease
Possible Manifestations

• Unpredictable and maladaptive behavior
• Possibly create their own dental pathology
• Dependability problems re: appointments & treatment responsibilities
• Exaggerated fears or anxieties
• “Not my fault!”
Patients In Active Disease
Possible Manifestations - Part 2

- Arrogant behavior
- “Suspicious” or “alleged” drug allergies
- May have complex medical histories
- Unexplained drug reactions
- Changes in drug tolerance
Chemical Dependence

If Suspected…

• CAGE questionnaire
• SBIRT (Screening, Brief Intervention, and Referral to Treatment)
• Referral information
"The best medical advice I ever got was from my dentist."

Drug abuse...
You don't have to preach about it... just teach about it.

Partnership for a Drug-Free America
Treating Patients with Addictions

“Properly addressing the health needs of an addicted patient requires the skills of a specialist in addiction treatment, skills that neither ethicists nor most dentist possess.”

Addicted Patients are Medically Compromised

• As are patients with diabetes, hypertension, and asthma
• Avoid treating a patient like “one of them” instead of “one of us”
• No less deserving of others’ respect

Address the Addiction Disorder

When addiction is understood as a medical disorder, it becomes easier to address it in the same manner as any other medical condition, with respectful, but matter-of-fact criteria.
Reassure the Patient

In the context of pain treatment, the patient’s addictive disorder will not be an obstacle for the relief of pain. However, we will not enable the addiction.
Accommodate Preexisting Opioid Dependence

Physically dependent on opioids – prescribed for pain or for addiction or dependent on street opioids – must have their baseline opioid requirements met plus additional opioids for acute pain treatment

Provide a different opioid for the acute pain

Quandary

• It is generally considered unethical to withhold opioid analgesia from patients with an addictive disorder….yet patients should not be given treatments that fail to help or harm them.*

• The only absolute contraindication to treatment in US federal regulations involves prescribing opioids when diversion to the illicit market is known to be occurring.*

Dental Treatment
Patients in Active Disease

• No simple answers!
• Requires accurate diagnosis of dental pathology
• Physician consultation?
• Antibiotic prophylaxis for IV drug users
• More difficult & longer treatment time
Dental Treatment
Patients in Active Disease - Part 2

- Attempt to offer immediate relief of painful condition
- Consider drug interactions, tolerance, cross tolerance
- Clear guidelines on post-operative analgesics
- Stabilization of oral condition
- Not enable the addiction
Informed Consent Dilemma?

“If addicted, the patient is only partially capable of making his own decisions about oral health in relation to his oral pain and desire for drugs.”

Chronic Pain Disorders
Often Co-occur with Chemical Dependence

Yunus, Sem Arth Rheum 2008
Hyperalgesia: Enhanced Response to Painful Stimulus

Pain Processing
Ascending and Descending Pathways, Sensitization
Pseudoaddiction

• Pattern of drug-seeking behavior of pain patients receiving inadequate pain management that can be mistaken for addiction
  – Cravings and aberrant behavior
  – Concerns about availability
  – Clock-watching
  – Unsanctioned dose escalation

• Resolves with re-establishing analgesia

Dental Treatment
Patients in Recovery - Part I

• Accurate diagnosis
• Determine patient’s status in recovery process
• Adequate, possibly phased treatment
• Knowledge of relapse prevention
Dental Treatment
Patients in Recovery - Part 2

• Consult with patient’s physician
• Involve patient’s sponsor, significant other, counselor, etc.
• Initiate immediate relief of pain
• Treatment time may be longer
• If possible, postpone potentially extremely painful procedures until patient is in stable recovery for two years
Dental Treatment
Patients in Recovery- Part 3

A firm foundation in recovery will reduce the risk of relapse

Conversely, abstaining without the support of a recovery program, or if just beginning recovery process, the overall risk of relapse is greater.

Savage. J. Pain Symptom Manage, 1993
Patients in Medically Assisted Treatment (MAT)

Part 1

If the drug of choice was alcohol
- Antabuse (Disulfiram)
- Naltrexone (ReVia) - do not prescribe opiates; consult physician
- Acamprosate - lowers neural exictab.
- Consult with patient’s physician
- May or may not be involved in a support group
Patients in Medically Assisted Treatment (MAT)  
Part 2

If the drugs of choice were opioids

- Buprenorphine- Suboxone or Subutex,
- Methadone or LAAM
- Naltrexone

- Consult with patient’s physician
- May require discontinuing MAT medications if opioids are to be prescribed
- May or may not be involved in support group
Preoperative Management

- Determine patient’s status in recovery process
- Encourage patient to intensify involvement in recovery program
- Include the patient’s sponsor or trusted member in pretreatment interview
- Reassure patient that chemical dependency will not deter adequate treatment of anxiety and pain

Preoperative Management

Part 2

- Involve patient treatment decision process including medication choices, dosing, scheduling
- Discuss, document risk of relapse when using mood-altering medications
- Consult with patient’s primary care physician or addictionologist, if possible
- Pre-emptive analgesics…prescribe NSAID’s 1 hour before procedure
Many patients in recovery are aware of mood-altering and abuse potential associated with drugs used for premedication and may refuse them for this reason.
Encourage Non-pharmacologic Relaxation Techniques for Stress and Anxiety Control

- Encourage nonpharmacologic techniques for stress & anxiety control**

- Biofeedback, imagery, meditation, soothing music through personal earphones

Intraoperative Management

- Carefully consider oral anxiolytics or N$_2$O/O$_2$ but only after thorough discussion of potential risks with patient and physician
- Consider Propanolol for anxiety

*Moore, P. Pharmacology and Therapeutics for Dentistry , 6$^{th}$ edition, p 204.2011.
Intraoperative Management
Part 2

- Obtain profound local anesthesia *
- Use a long-acting local anesthetic at termination of appointment **
- Use of long-acting and local anesthetic with buprenorphine ***

Intraoperative Management

Part 3

• Anecdotal reports of difficulty in achieving adequate anesthesia in recovering alcoholics/addicts are common
• Extended periods of recovery response as normal population
• Higher than normal doses of LA attributed to anxiety or depression

Assuring the patient throughout the procedure is beneficial, as is a slower, more gentle approach to help reduce postoperative iatrogenic pain.
Potentially Hazardous Drugs

- Narcotics (opiates)
- Sedatives
- All major and minor tranquilizers
- Some antihistamines
- Some decongestants
- Central nervous system stimulants
- Anesthetic gases
- Mouthwashes containing alcohol
Prescribing Drugs That Impact Mood

- Inform patient & family member risks vs. benefits
- Consult patient’s physician or after-care professional re: treatment plan and medications
- Encourage patient to intensify engagement with support activities
- Seek immediate medical evaluation/care if relapse occurs
Informed Consent

• Value of written informed consent
• Benefits of adequate pain control vs. risk of relapse
• Permission to speak to physician/pharmacist
• One Rx by dentist
• Clear policy re: lost/stolen prescriptions
• No telephone refills
• Sponsor/responsible family member fill Rx, dispense med
Postoperative Management

• Use opioid/nonopioid analgesics for moderate to severe pain
• Prescribe analgesic administration on a clock-regulated basis… NOT prn
• Avoid unsupervised control of potentially intoxicating medication… have the trusted other dispense meds *
• Obtain adequate informed consent… document!

Postoperative Management
Part 2

- Management of pain in the patient recovering from addiction may require the use of opiates to achieve adequate pain control
- Opioid therapy is the gold standard of practice for the treatment of acute post-surgical or trauma induced pain
- If pain persists beyond appropriate healing period, search for underlying cause (abscess, osteitis)
In selecting a specific opioid analgesic, achievement of effective pain relief should guide decision

- Has been suggested that partial agonist-antagonist (pentazocine) less abuse potential – but not as effective and has unpleasant psychomimetic adverse effects

- Use of tramadol for acute pain questionable – can initiate physical dependency and is a weak mu equivalent

Prin of Addiction Medicine, 4th ed, 2009
Post-operative Pain Relief

Take the following medication exactly as scheduled for the next ___ days.

**Ibuprofen** 200 mg (3 / 4 tablets)

**PLUS**

**Tylenol Extra Strength** 500 mg (2 tablets)

A total of ___ tablets **with food** at:

___ am, ___ pm, ___ pm, and ___ pm
Potential Hepatotoxicity with Acetaminophen use in Alcoholic Patients

- Questionable concern with active alcohol abuse
- No evidence of liver impairment with abstinence ($\leq 4$gm/day)

### Anticipated post-procedural pain:

#### MILD PAIN
Examples: simple extraction, routine endodontics, scaling/root planing, gingivectomy, frenectomy, subgingival restorative procedures

- Ibuprofen 200 to 400 mg as needed for pain every 4 to 6 hours

#### MODERATE PAIN
Examples: implant surgery, surgical extraction, quadrant periodontal flap surgery with bony recontouring, surgical endodontics

- Ibuprofen 400 to 600 mg around-the-clock every 4 to 6 hours for 24 hours
- Then ibuprofen 400 mg as needed for pain every 4 to 6 hours
- Ibuprofen 400 to 600 mg plus APAP 500 mg around-the-clock every 6 hours for 24 hours
- Then ibuprofen 400 mg as needed for pain every 4 to 6 hours

#### SEVERE PAIN
Examples: partial or full bony impaction surgery, complex implant or periodontal surgery

- Ibuprofen 400 to 600 mg plus APAP 650 mg with hydrocodone 10 mg around-the-clock every 6 hours for 48 hours
- Then ibuprofen 400 mg as needed for pain every 4 to 6 hours
- APAP 650 mg plus oxycodone 10 mg around-the-clock every 6 hours for 48 hours
- Than APAP 650 mg to 1000 mg as needed for pain every 6 hours

### If NSAIDs can be tolerated:

- APAP 650 mg to 1000 mg as needed for pain every 6 hours

### If NSAIDs are contraindicated*:

- Inadequate pain relief
- Inadequate pain relief
- Inadequate pain relief
- Inadequate pain relief

### ADDITIONAL CONSIDERATIONS

Daily ibuprofen doses for acute pain should not exceed 2400 mg
Daily APAP doses should not exceed 4000 mg

Reducing need for post-procedural analgescics:
- Pre-emptive NSAID analgesia
- Postoperative long-acting local anesthetic

*Short-term use of NSAIDs are contraindicated in patients with a history of gastrointestinal ulceration and aspirin intolerance/cross sensitivity (eg, aspirin- or NSAID-induced allergy or asthmatic attacks) or patients receiving anticoagulation therapy
General Considerations

• Treat or refer to specialist?
• Importance of pain control for emergency dental conditions
• For patients in recovery, coordinate pain management through primary care physician*

General Considerations

• Value of profound local anesthesia *
• Consider using a NSAID
• Before prescribing an opioid, consider physician consult
• Consider agonist-antagonist analgesic

Questions?

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