DISCLAIMER

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Appreciate Mark Scheutzow M.D. Addiction Medicine
DRUG ABUSE AND MEDICAL PROFESSIONALS

GSIPP

Hans C. Hansen, MD
Objectives

- Define substance dependence and addiction
- Define impaired physician
- Epidemiology of substance use disorders in physicians
- Physician vulnerability
- Comorbidities
- Treatment options
- Outcomes (ASA data)
<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>All U.S.A.</td>
<td>7%</td>
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<tr>
<td>Physicians</td>
<td>8%</td>
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<td>Law Enforcement</td>
<td>8%</td>
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<td>College Students</td>
<td>18%</td>
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<td>Airline Pilots</td>
<td>04%</td>
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<td>Interstate Truckers</td>
<td>12%</td>
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Physician Drugs of Abuse 2001

- Alcohol 50 to 60%
- Opioids 30%
- Benzodiazepines 20% (40% for females)
- Marijuana 20%
- Cocaine 10%
- Amphetamines, Ritalin 10% (20% female)

Any fool can tell the truth, but it requires a man of some intelligence to know how to lie well.

Butler, Samuel
DRUG AND ALCOHOL ABUSE AMONGST MEDICAL PROFESSIONALS

- WHAT IS IT
- WHY IT HAPPENS
- EVOLUTION - THE HIDE
- THE SCIENCE
- DETECTION AND TREATMENT
- EXPECTATIONS
DRUG AND ALCOHOL ABUSE AMONGST MEDICAL PROFESSIONALS

- WHAT IS IT?
  - WHY IT HAPPENS
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  - THE SCIENCE
  - DETECTION AND TREATMENT
  - EXPECTATIONS
DRUG AND ALCOHOL ABUSERS...

- EQUAL OPPORTUNITY DISEASE
- EASY ACCESS
- NO EASY WAY TO PICK IT
- EDUCATED IN COVER-UP AND SELF TREATMENT

IT'S ABOUT 10% OF THOSE AROUND US...
DRUGS AND ALCOHOL

- KILL SELF-ESTEEM AND CONFIDENCE
- CAN BE PERPETUATED BY FEAR/ANXIETY
- POLYPHARMACY IS COMMON
- COMORBID DISEASE IS USUALLY FOUND
Definition of an “Impaired Physician” dates to 1982 and was recognized by the AMA in JAMA in 1973.

“One who is unable to practice medicine with reasonable skill and safety to patients, because of physical or mental illness, including deterioration through the ageing process or lack of motor skill, or excessive use or abuse of drugs, including alcohol.”
One or more of the following in a 12 month period

- Failure to fulfill major role obligations at work, school, or home
- Recurrent substance use in situations in which it is physically hazardous
- Current substance-related legal problems (e.g. arrests for substance-related disorderly conduct)
- Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance
More than 3 of the following during last 12 months:

- Tolerance
- Withdrawal syndrome
- Larger amounts/longer period intended
- Inability to/persistent desire to cut down or control
- Increased amount of time spent in activities necessary to obtain substance
- Social, occupational and recreational activities given up or reduced
- Substance use is continued despite adverse consequences
Characteristics of Addiction

- Characterized by the 5 C’s:
  - Impaired Control
  - Compulsive use
  - Continued use, despite harm
  - Craving
  - Consequences
Etiology of Addiction

- Genetic
  - 3 to 4x higher risk for children of substance abusers
  - 8 x higher risk for alcoholism if both biological parents alcoholic
- Psychosocial
- Environmental
  - History of victimization (Child abuse)
  - Biological (Reward Deficiency Syndrome)
  - Exposure to agent
Psychiatric Definitions from DSM-IV

Abuse (1 or more in 12 months)
- Failure to fulfill role obligations
- Use in hazardous situations
- Recurrent legal problems
- Use despite adverse consequences
New Definition of Addiction by ASAM

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.
Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one’s behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.
Substance Use or Chemical Dependency is the most frequent disabling illness among physicians
Prevalence estimates 11 - 14% at some time in their life
Equal to prevalences found in general population (no higher risk in health professions)
Two waves: residents and training and physicians in mid to late career
Median age in treatment: 45 years old (range 25-83)
Approximately 80,000 MDs currently have a SUD
Female to male: 1:7 but will change as more females enter medicine
Incidence of Physician Impairment due to Drugs

- **Incidence**
  - 1 in 10 physicians will become addicted
- **Specialties**
  - ER, Psychiatry, Anesthesiology
- **Anesthesiologist**
  - Represent 4% of all physicians
  - 13% of all MD’s in treatment
    - 3x higher than internist
  - Highest risk of relapse of all specialties
    - 19% per year with h/o narcotic addiction

Physician Substance Abuse

- 15% lifetime risk drug and alcohol
- 7% are impaired at any given time
  - About 1/3 are alcohol only
  - About 1/4 are drug only
  - About 10% involve street drugs

The art of medicine consists of amusing the patient while nature cures the disease.

Voltaire
Highest

- Anesthesiology (opioids and recently subset with propofol)
- Emergency medicine (alcohol, stimulants, MJ, now zolipidem)
- Psychiatry (benzodiazepines)
- Family Medicine (alcohol – due to large number of MDs relative to other specialties)
Lowest
- Radiologists
- Pathologists
- Pediatrics

Conflicting data – Surgeons: most data high (alcohol)
Although the prevalences are similar to the general population, the actual drugs used are different due to the familiarity and greater availability open to physicians.
50% abuse alcohol: (≥5 drinks/ day or 14/wk for M or ≥4/d or 7/wk for F)
35% abuse opioids (driven by anesthesiologists)
15% abuse stimulants or sedatives
31% abuse both alcohol and a medication
48% were dual diagnosis – drug and psychiatric d/o (primarily anxiety and depression)
DRUG AND ALCOHOL ABUSE AMONGST MEDICAL PROFESSIONALS

WHAT IS IT?

WHY IT HAPPENS

- EVOLUTION-THE HIDE
- THE SCIENCE
- DETECTION AND TREATMENT
- EXPECTATIONS
THOSE THAT DENY PERSONAL PROBLEMS

ACHIEVERS = SUCCESS

DENIAL = POOR DECISION MAKING = RISK TO THE ABUSER/COMMUNITY = BREACH OF STANDARD OF CARE
Addiction as a Disease (image)

“The fact that well trained and successful physicians relapse is at least circumstantial evidence that the drive to relapse originates far from the realm of conscious intent.”

-David Gastfriend. JAMA 2005
13-17% mortality rate of substance abuse among untreated physicians

- 1986, Alexander et al. reported that most drug related deaths occurred during the first 5 years after graduating medical school
- 2001, Domino et al. reported that anesthesiologists 3x greater rate of drug-related death and suicide than general internists
- 2002, Booth et al. reported 18% of residents died or nearly died before substance abuse was suspected
Risk Factors for Drug Use

- Physicians are more likely to self treat than the general population
- Easy access to drugs
- Greater curiosity about drug effects
- Underestimate the dangers and are over confident in ability to use
WHAT IS IT?
- WHY IT HAPPENS?

EVOLUTION-THE HIDE
- THE SCIENCE
- DETECTION AND TREATMENT
- EXPECTATIONS
MEAN DURATION OF ABUSE PRIOR TO TREATMENT

- Alcohol: 10 - 22 years
- Benzos: 7 - 12 years
- Hydrocodone: 2 - 5 years
- Powder Cocaine: 2 - 5 years
- Crack Cocaine: 3 - 9 months
- Fentanyl class: 3 - 9 months
Isolation
Withdrawal from family, friends, leisure activities
Increased episodes of anger, irritability, and hostility
Inaccessibility
Prescriptions for staff, family
Weight loss
Increased sick days, Monday morning sick days
Spending more time at hospital – even when off duty
Anesthesiology – inappropriate/greater use of Fentanyl in cases
Irregular work performance occurs when problem is advanced
Poor work performance is the last to manifest
Newer concept - Malpractice as PTSD:

“What I realized in working with victims of terror was that I had noticed many doctors suffered the acute stress reaction. For a conscientious physician, discovering he has made a serious mistake can be devastating. He is in a daze, not unlike victims of accidents, warfare, or terrorist acts. He can’t believe what has happened. He is in shock, bewilderment, and fear. This may explain some of the workaholism, alcohol and drug use, and suicides among physicians.”

-Barry Bub, MD
According to the AMA, physicians have an ethical obligation to report impaired, incompetent, and unethical colleagues.

Report anonymously to the state’s Physician Health Program

Only 20% of states have laws mandating reporting. 1974 Disabled Doctors Act urged (but did not require) mandatory reporting.
Barriers to Reporting

- “Code of Silence” = hopes that the problem will resolve
- Fear of retaliation
- Protection of practice or hospital’s reputation
- Accusations of “over-reacting”
- Lack of understanding of addiction as a disease
- Stigma attached to addiction and psychiatric d/o
- Lack of awareness of PHP programs
What to do? (ASA Recommendations)

- Do not confront suspected addict on your own
- Maintain confidentiality
- Information gathering (not an investigation)
- Document facts and behavior
- Confirm identified signs: Do not rely on rumor
- Have compelling evidence to report if individual refuses treatment
  - Corroboration with urine/blood testing
- Once confronted do not leave individual alone
- No liability to reporter if acted in good faith
Very carefully
Expect hostility, threat of lawsuit and denial
Act immediately when evidence is present
Random urine or blood specimen
  - If refuse, immediate suspension
  - Permanent termination
- Does not have to be reported to the state
- If volunteer, place on medical leave of absence
  - Evaluation vs. treatment
  - If found to be addicted will immediately be placed into an inpatient tx program
- Reported to state
  - Adverse actions taken (Hospital, License board)
  - Medical malpractice
Goals of treatment
- Safe detoxification
- Develop a chemical free lifestyle
- Exposure and assimilation into a recovery program

There is no cure for addiction
- Successful treatment means recovery
- Lifelong process
DRUG AND ALCOHOL ABUSE AMONGST MEDICAL PROFESSIONALS

- WHAT IS IT?
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- EVOLUTION-THE HIDE

THE SCIENCE

- DETECTION AND TREATMENT
- EXPECTATIONS
“The seat of the addict’s soul lies in the nucleus accumbens”
- Griffith Edwards
Addiction as a Disease and Not a Moral Failing

- Genetic Predisposition: 55% for alcohol and 72% for cocaine
- Environmental modification
- Stimulus provided by substance of abuse
- Alterations initiated in the nucleus accumbens
- Ventral Tegmental Area has connections to amygdala, PFC, striatum which initiates long-lasting neurobiological changes
Addiction as a Disease and Not a Moral Failing

- Activation of the ventral tegmental dopamine pathways by substances of abuse
- Transition from conscious prefrontal cortex glutaminergic pathways to striatum
- Striatal dominance of drug seeking behaviors is unconscious
- Transition to striatal dominance is key “switch” in addiction
- Maintained unconsciously by amygdala, striatum
What Causes Substance Abuse?

- Genetic predisposition
- Childhood family dysfunction (emotional abuse, instability)
- Depression, Manic-depression, ADD
- Cultural acceptance
- Exposure to mood altering chemicals
  - Alcoholic skip generation model
Addiction as a Disease and Not a Moral Failing

- Two examples of the power of striatal behavioural sensitization
- Cocaine dependent people shown drug cues for 33 milliseconds
  - Too short to be visually recognized
  - 48 hours later it was demonstrated that cues were both recoded and remembered
- Cocaine dependent people show activation of the mesencephalon (origin of the VTA) when presented with words assoc w cocaine use
Drugs affect the brain
Even after they’re out of your system

Your Brain on Drugs
An active abuser can’t (not won’t) stop

Normal

Craving Cocaine
WHAT IS IT?
- WHY IT HAPPENS
- EVOLUTION-THE HIDE
- THE SCIENCE

DETECTION AND TREATMENT
- EXPECTATIONS
100 Alcoholic Doctors – 21 Year Follow-up

- 20 relapsed and recovered
- 10 died of non-alcohol related causes
- 8 died of alcohol related causes
- 73% abstinent at 21 years
- Strong relationship between 12-Step and abstinence
RELAPSE

- 25% 1 RELAPSE
- INCREASED RISK W/FAMILY HISTORY
- COEXISTING PSYCH
- USE OF A “HEAVY OPIOID”

15% AT RISK SOME POINT IN THEIR CAREER
Factors Contributing to Relapse

- Greatest risk factors are family history of SUD and use of major opioids but only in presence of psychiatric disorder
- 13x increase with FH, use of opioids, and psychiatric d/o
- Continued Denial
- Failure to Understand Disease of Addiction
- Poor stress coping mechanisms – stress is single greatest factor
- Complacency and overconfidence
- Unresolved issues of shame and guilt
Treatment of Impaired MDs

- Alcoholic MDs followed for more than 1 year have successful outcomes of 74-95%

Coerced Treatment

- Treatment under legal pressure have outcomes as favorable as those who enter voluntarily
- Carrot and Stick
- Professionals in Florida have 90% plus recovery rates

This is your license

This is your license on drugs
What is the normal length of stay for a professional?
Most effective treatment:
- Inpatient treatment 4-12 weeks
- Thorough understanding of the disease process
- Long-term care and follow-up
- Regular participation in recovery groups

Recovery: Result of successful treatment
- 60-94% of physicians recover
- Lifelong process: Not cured, addicted for life
Other Professions – Nurses

- Again – Prevalence = general population (11-14%)
- Most abused substance is carisoprodol
- Higher rates of opioids and benzodiazepines
- Critical care and ER nurses at greatest risk
- Obtain meds by diverting
Prevalences may be slightly higher (16-18%)

Health care professionals that engage in most self-medication

Divert un-claimed prescriptions
Opioids > sedatives

Up to 40% may have diverted controlled substances


12-Step Programs

- Considered 2nd most important contributing factor to physician success (first is mandatory urine screening)
- First Step is admitted powerless over a substance
- Structured support network
- Concept of Higher Power => prevents regression to defenses of denial and projection
Treatment and Recovery

- 12 Step based abstinence programs
- Medication based
  - Methadone maintenance
  - Antabuse
  - Newer drugs
- “Responsible drinking” organizations
- Psychological based
Standard Treatment

- Detoxify
- 12 step based - admit problem, take responsibility, abstain, help others
- (Re)learn coping skills
- Therapy for underlying emotional problems
- Treatment of associated psychiatric problems
Treatment and Recovery

- Decide to quit - 2% 5 year success
- Detox only - 2%
- 30 day evening outpatient - 8%
- 30 day day program - 17%
- 30 day inpatient - 23%
- 90 day inpatient - 65%

Extended aftercare increases success rates 25 -50%. Note: second treatment has slightly higher success than first - subsequent treatments have lower success rate.
- Do not provide treatment
- Promote early detection, assessment, evaluation
- Referral to residential treatment program
- Increasingly dealing with issues of boundary violations
- Usually 501(c)3 but can be part of state medical society or board
26% self-referrals
20% referral by colleague
21% referral by medical board
14% referred by hospital medical staff
17% family, law enforcement, attorneys
Contingency contracts with consequences – usually 5 years
Schedule and coordinate random urine testing (usually 20+ health professional panel)
Hair and nail testing used
Ethyl glucoronide testing for all participants
Required 12-Step meetings
Assignment to an addictionologist
78% of participants had no positive test for alcohol or drugs over 5 years.
At least one relapse occurs in about 22-25% of physicians over 5 years.
Up to 92% 5 year success including renewed contracts with relapse.
At 5 years 71% of physicians still practicing.
Residential Programs

- Recommended as by time problem recognized usually significant
- Considered standard of care by Medical Boards
- Dedicated HCP programs: Farley in Williamsburg; Talbott in Atlanta
- Include psychiatric and neuropsychological evaluation
  - Family therapy component
- Followed up by relapse prevention programs
Pharmacotherapy

- Disulfiram (blocks alcohol metabolism) offered
- Medical Boards do not usually support use of opioid agonist
  - Naltrexone may be used
- Treatment of pain with long acting opioids very rarely considered
DRUG AND ALCOHOL ABUSE AMONGST MEDICAL PROFESSIONALS

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- DETECTION AND TREATMENT
- **EXPECTATIONS**
Comorbid Disorders in Physicians

- 52% Substance use disorders
- 29.6% Other psychiatric disorders

Alcohol is the drug of choice for most physicians with addiction.

However, only about 10% of anesthesiologists enter treatment for alcohol addiction.

The majority of addicted anesthesiologists are addicted to fentanyl and sufentanil.
Physician Suicide

- Male doctors 40% higher than general population
- Female doctors 130% higher than general population


Teitelbaum
Psychiatric Comorbidity

- Increasing in frequency
- Little being done about it
  - Center et al, JAMA. Confronting depression and suicide in physicians: a consensus statement. 2003 Jun 18;289(23):3161-6
Drug Related Deaths

- Michael Jackson
- Bruce Lee
- Richard Burton
- Montgomery Clift
- WC Fields
- Robert Pastorelli
- Murphy Brown
- Dana Plato
- Jim Morrison
- Whitney Houston
- Margaux Hemingway
- Marilyn Monroe
- John Belushi
- River Phoenix
- Heath Ledger
- Dee Dee Ramone
- Sid Vicious
- Amy Winehouse
- Chris Farley
- Judy Garland
- Anna Nicole Smith
- Elvis
- Kurt Cobain
- Janis Joplin
- Len Bias
- Brittany Murphy
- Chris Pettiet
- Jimi Hendrix
- Brian Jones
- Billy Mays
- Ike Turner
- Hank Williams, Sr.
- Brad Renfro
Dr. Sundeep Kapoor
Vs. Conrad Murray M.D.
CRIMINALIZATION OF MALPRACTICE

- 2 DOZEN CASES IN 2 DECADES
- 2003 ALONE 15
- BREACH OF STANDARD OF CARE
- CONRAD MURRY M.D.-PROPOFOL
- SANDEEP KAPUUT M.D.- CONTROLS

KAPOOR WALKS
GOOD FAITH TREATMENT VS,
GROSS NEGLIGENCE
There are Gender Differences - Females

- Single and younger than male counterparts
- Enter treatment at younger age compared to males – average age 40 yo
- Have greater psychiatric comorbidity especially anxiety and depression
- Experiences more guilt and shame and lower self-esteem
- Driving psychological factor is considered role deprivation – being unmarried and not having children
There are Gender Differences - Females

- Females use more alcohol than other substances except anesthesiologists.
- Greatest use of alcohol is in female surgeons.
- Alcohol use of female surgeons \( \geq \) male surgeons of same age cohort.
- Subpopulation of female anesthesiologists dependent on propofol.
- Tend to do better in treatment with less relapses than males.
Suicide in Physicians

- 70% related to substance use disorder in both females and males
- Suicide rate in female physicians highest for any age matched cohort
- Female physicians more like to have attempted suicide than males and at younger age
- For non-physician females only 1 in 10-15 attempts are successful, for physicians 1:2-3 are successful
Reasons Multifactorial

Anesthesiologists: “Pharmacologic Invincibility”
  Psychological overconfidence from dealing with medications
  Relative ease of diverting small quantities of potent opioids
Emergency Med: sensation-seeking
Surgeons: emotional detachment
Psychiatrists: benzos work for patients
Successful Re-entry

Successful reentry requires:

- Complete a structured treatment program
- Minimal denial, well motivated
- Return to a supportive environment
- Re-entry agreement implemented before starting work
Re-entry Agreement

Strongly recommend:

- No night/weekend call for three months
- Not handle narcotics for three months
- Random testing of returned syringes for drug content
Can be lethal with narcotic users
- Death may be identifying symptom

Overall relapse rate:
- 14% per year
- 19% if history of opioid abuse

Menk study
- 34% successful re-entry of residents who abused narcotics vs. 70% success with other agents


230 reported cases in 111 programs
- 199 received within the reporting interval
- 31 were enrolled inactive treatment at completion of survey

65% continued anesthesia
- 45% finished
- 4.5% died

40.1% chose another specialty

16% Left Medicine

199 Residents Treated
- 32 Left Medicine 16.1%
- 167 Returned to Medicine 83.9%
  - 14 Choose Different Specialty (Early Group) 8.3%
  - 153 Chose Anesthesiology (Reentrant Group) 91.6%
    - 53 Chose Different Specialty (Late Group) 34.6%
    - 100 Continued in Anesthesia 65%
      - 9 Died 9%
      - 91 Finished Training 91%
How Successful is Re-Entry

- Long-term outcome
  - 56% were successful in some specialty of medicine at the end of the survey period.
  - Change in specialty showed substantial improvement in success rate and avoided significant mortality.
  - Redirection into lower-risk specialties may allow a larger number to achieve successful medical careers.

Prevention

- Available help
  - Always have a person you can call for help
- Education
  - Awareness of the disease
  - Family and significant others
- Accountability
  - Monitoring narcotics, use, & waste
  - Random testing of syringes
  - Satellite pharmacy
- Stress Management
  - Improperly dealing with stress can lead to chemical coping or self medication
Relapse

- Relapse rate highest in first 6 months.
- Lower after 1 year.
- After 2 years continuous sobriety, chance of relapse only slightly higher than general population starting abuse.
- After 5 years, relapse rate lower than general population abuse rate.
Relapse

- Cocaine and nicotine cravings continue for years.
- Opiate cravings about 6 months.
- Cross addiction rate 33%.
- Mentation (I. Q.) improves for 6 months to 3 years (alcohol and benzos longest).
How Substance Abuse Affects YOU

- Mortality Rate triple general population
  - Wrongful death cases
- Failure to diagnose - ask the questions
- Failure to treat - if you fire the patient
- Reporting to boards - by spouses, pharmacies, treatment centers
Healthy ways to deal with stress

- Exercise and good nutrition
- Develop an interest outside of medicine
- Spiritual enhancement
- Maintain your sense of humor
- Balance work, fun, and rest
- Take time off work
- Realize you may make mistakes
- Develop better interpersonal skills
Treat health care professionals as you would any other patient.
There are specific return to work issues.
Obtain some tests of mental status WHILE ON MEDICATION and show normal mental function before returning to work.
Protect yourself and your doctor-patient relationship
Addiction is a disease that can be successfully treated.
Addiction has characteristic biological, psychological, social and spiritual manifestations.
Without treatment addiction is progressively fatal.
Physicians have a moral, ethical, and social obligation to report impaired colleagues.
The state PHP program is the most successful strategy.


