



Requiem for a Dream

The 2000 feature film *Requiem for a Dream* shockingly shows how the lives of four characters are torn apart by their addictions to various drugs. Among these characters is a single mother who becomes addicted to prescription diet pills. Ellen Burstyn's (photo above) brave performance accurately depicts the horrors that can come from being addicted to even the most innocuous-seeming drugs, including prescribed diet pills and mass quantities of caffeine.

Requiem for a Dream earned a *PRISM Commendation* for its accurate depiction of drug abuse and addiction. This film is a highly recommended, brilliant example of how a good script, excellent direction and acting, and accuracy of depiction can attain critical success while maintaining high standards of filmmaking.

The Agony and Ecstasy of MDMA

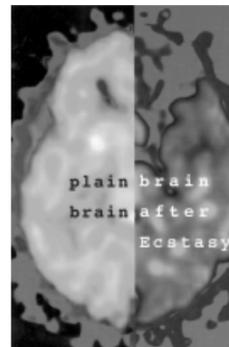
The use of the popular "club drug" ecstasy is on the rise in the United States. This presents a national health risk, as Dr. Alan I. Leshner, Director of the National Institute on Drug Abuse (NIDA), explains: "There is no safe way to use [MDMA]...even experimenting with [MDMA] is an unpredictable and dangerous thing to do." Chronic use of MDMA may cause long-term problems with emotion, memory, sleep and pain.

Ecstasy has the potential for dangerous side effects like increased heart rate and blood pressure, possible long-term damage to those parts of the brain critical to thought and memory, and birth defects (if ingested during pregnancy). Because of these dangers, ecstasy is now illegal and in 1985 became a "Schedule I" drug, meaning it has no medical value whatsoever.

Some of the additional risk involved in the use of ecstasy is related to its illegal sale. Due to an increased demand for ecstasy, drug traffickers are manufacturing more and cheaper pills. Dangerous chemical additives or **adulterants** are frequently mixed with — or substituted for — MDMA during production. One of the most common is DXM (dextromethorphan), a legal cough suppressant that, when taken in high doses, can inhibit one's ability to regulate body temperature. DXM and the similar PMA (paramethoxyamphetamine) have been known to cause severe dehydration and heat-stroke in users. Adulterants can also cause overdose in users who think they've taken "weak ecstasy" and take more pills resulting in a lethal dose of the adulterant.

Adulterants found in "ecstasy" can range from aspirin or caffeine to "speed" or "Special K" (ketamine), an animal tranquilizer. Some ecstasy pills even show traces of arsenic, heroin, and other deadly toxins.

Possible medical uses for MDMA are currently being studied in Switzerland, Israel and Spain, as well as in the United States. Both studies examine MDMA's effects on post-traumatic stress disorder (PTSD). A study examining MDMA dose response safety in cancer patients is currently being conducted at Harbor-UCLA Medical Center in Torrance, California. Due to the recent increase in abuse and trafficking however, it is difficult for researchers to obtain the drug for scientific study.



The brain scans to the left illustrate the sharp difference in human brain function for an individual who has never used drugs and one who has used ecstasy many times, but had not used any drugs in the three weeks prior to the scan.

Source: National Institute on Drug Abuse (NIDA)
For more information call (888)NIH.NIDA
<http://www.nida.nih.gov>

Prescription Drugs on the Web

<http://www.nida.nih.gov/drugpages/prescription.html>

The National Institute on Drug Abuse provides research reports and prescription drug-related information on its website.

<http://www.prescriptiondrugabuse.org>

This World Wide Web-based organization focuses on education, hope, and recovery for prescription drug abuse and addiction.

<http://www.rxdiversion.com/workplace.htm>

This site contains information on prescription drug abuse in the workplace.

<http://www.health.org/catalog/catalog.asp?key=12&detail=false>

The National Clearinghouse for Alcohol and Drug Information provides access to publications and reports on prescription drug addiction.

<http://www.mhsource.com/pt/p950127.html>

The Psychiatric Times' online edition features an in-depth article citing research on prescription drug abuse.

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Entertainment Industries Council, Inc.

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Spotlight on ... Prescription Drugs

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Prescription Drugs: Take as Directed

As major advances are made in the medical field, we are lucky enough to have more drugs than ever to heal our aches, pains and even our sorrows and fears. Now that drug companies are advertising on television and other media outlets, sometimes it seems like there's a drug for everything. Medical and pharmaceutical companies, however, have clear guidelines for developing, marketing and prescribing these medications. Often drugs that help one person achieve perfect health may cause serious or fatal side effects in another. One pill may make you feel better, but two could make you feel a lot worse. For these reasons it is important to *take medications as directed*.

Alan I. Leshner, Ph.D., Director of the National Institute on Drug Abuse (NIDA), announced new efforts to address a "dangerous new drug abuse trend" — the abuse of prescription drugs. Several indicators suggest that prescription drug abuse is on the rise. According to a 1999 study, more than a quarter of the nine million people who used prescriptions for non-medical purposes during that year were abusing for the first time.

Older Adults: *The Forgotten Risk*

Due to compromised health caused by the natural effects of aging, older adults use three times as many prescription drugs as other adults. While these medications are often necessary and beneficial to the patient, the *amount* of prescriptions this population uses makes them particularly vulnerable to prescription drug abuse. To complicate matters further, older adults may be prescribed inappropriately high doses of medications and are less likely to

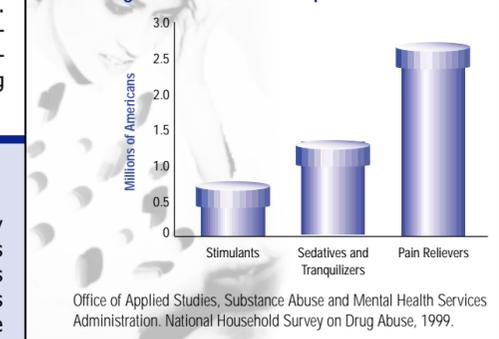


"When the writers told me, 'We're going to stab you in the back by a psychotic patient, and you're going to develop a subsequent drug addiction,' I was amazed. I didn't think John Carter was necessarily the face of drug addiction. But upon reflection, I realize there probably isn't one face of drug addiction."

Noah Wyle, *ER*, recipient at the 5th Annual PRISM Awards, on his character's addiction to prescription pain killers.

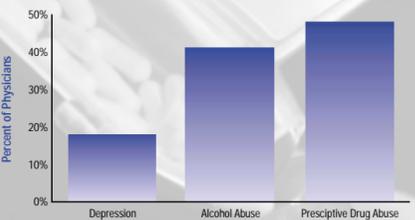
Although prescription drug abuse is similar to any kind of substance abuse, prescription drugs are legal medications, often prescribed by a trusted physician. In this way, addiction can sometimes develop in populations not commonly thought of as "typical drug users." Thus, when looking at characters in relation to prescription drug abuse and addiction, it is valuable to understand *who is at risk*.

Approximately 4 Million Americans Used Prescription Drugs for Nonmedical Purposes in 1999



take these medications according to directions. Taking the above factors into account, it is not surprising that misuse of prescription drugs may be the most common form of drug abuse among the elderly.

Many Physicians Have Difficulty Discussing Substance Abuse with Patients



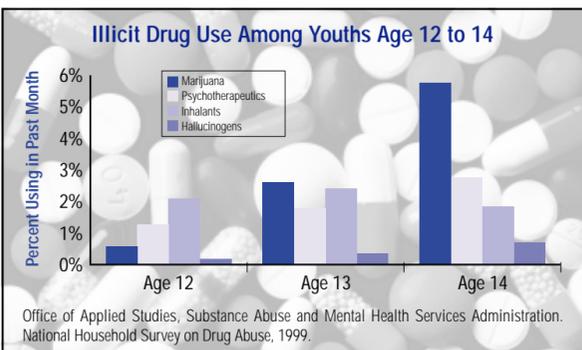
Over 40% of physicians report having difficulty discussing substance abuse, including abuse of prescription drugs, with their patients. In contrast, less than 20% have difficulty discussing depression.

National Center on Addiction and Substance Abuse at Columbia University (CASA). Missed Opportunity: National Survey of Primary Care Physicians and Patients on Substance Abuse. New York: CASA, 2000.

Drug use is a common problem among youth aged 12-25. When thinking about drug abuse among youth, we tend to focus on illicit "street" drugs. However, research shows that dramatic increases in numbers of new abusers of prescription drugs are found within this age group. Further, psychotherapeutic drugs — including painkillers and stimulants — are among the drugs most commonly abused by teens aged 12-14.

Women — Mother's Little Helper?

While the numbers of men and women who abuse prescription drugs are basically the same, there are some increased risks for women. Women are more likely than men to be prescribed an addictive prescription drug, particularly narcotics and anti-anxiety drugs — in some cases 48 percent more likely. This increases the possibility of abuse and subsequent addiction to these prescriptions. In addition, prescription drug abuse is more likely among adolescent girls aged 12-17 than boys the same age. Among women and men who use either a sedative, anti-anxiety drug, or hypnotic, women are almost two times as likely to become addicted.



Morphine has been termed a "Schedule II" drug by the Drug Enforcement Agency (DEA) which means that:

1. The drug or other substance has a high potential for abuse.
2. The drug or other substance has a currently accepted medical use in treatment [of illness] in the United States or a currently accepted medical use within severe restrictions.
3. Abuse of the drug or other substance may lead to severe psychological or physical dependence.

The Uppers and Downers of Addiction Abusers' Drug of Choice

It may be safe to say that no one is strung out on her prescription for Vaniqa, the new facial hair-removal medication. There are, however, certain kinds of drugs that affect the brain and the body in ways that elicit a feeling of being "high" or altered in a way that is pleasurable to the patient. While prescription meds are designed to improve the health of a patient, using them to enhance mood is actually misuse, or non-medical use.

Of all the drugs commonly prescribed by physicians, three classes appear to be the most commonly abused: **opioids**, **CNS depressants**, and **stimulants**. Below are some examples of each of these drugs for more specific depiction opportunities.

Opioids

Opioids, also referred to as narcotics, are frequently used to treat pain. When used as prescribed, under a doctor's supervision opioids can effectively and efficiently suppress pain. In addition to relieving pain, these drugs can affect regions of the brain that involve pleasure and can result in feelings of euphoria. Common opioids include:

- Morphine
- Oxycodone (OxyContin)
- Meperidine (Demerol)
- Hydromorphone (Dilaudid)
- Codeine
- Propoxyphene (Darvon/Darvocet)
- Hydrocodone (Vicodin)

Users of opioids can build up a tolerance for the drugs, which may lead them to increased use in order to achieve the same initial effects. Thus, long-term use can lead to physical dependence and

possibly addiction. Once addicted, the body cannot function properly without the drug. When an addicted person fails to take the opioid, he or she may experience withdrawal symptoms such as restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes with goose bumps, and involuntary leg spasms. As bad as withdrawal symptoms may be, they are sometimes better than possible alternatives: for example, a large single dose of an opioid could cause severe respiratory depression.

CNS Depressants

CNS Depressants ("Downers") are drugs that slow normal brain function and reactions. When used properly, these medications can effectively treat anxiety and sleep disorders. CNS depressants fall into two categories.

Barbiturates for treatment of anxiety and sleep disorders:

- Mephobarbital (Meberal)
- Pentobarbital (Nembutal)

continued on page 3.

CNS Depressants, continued from page 2.

Benzodiazepines for treatment of anxiety, acute stress, and panic attacks and **short term** treatment of sleep disorders:

- Diazepam (Valium)
- Triazolam (Halcion)
- Chlordiazepoxide HCL (Librium)
- Alprazolam (Xanax)
- Estazolam (ProSom)

When first taking a depressant, the user usually feels sleepy and uncoordinated. After a few days, his or her body becomes accustomed to these side effects. If one uses these drugs long term, the body will develop tolerance for the drugs, and larger doses will be needed to achieve the same initial effects. Continued use can possibly lead to physical dependence and — when use is reduced or stopped — withdrawal.

With CNS depressants, it's the withdrawal that can be problematic. Because these medications are designed to slow brain activity, withdrawal from long-term abuse can cause brain activity to increase at a rapid rate, possibly causing seizures and other harmful consequences. Thus, if an addict wants to discontinue use of these drugs, it is recommended that he or she seek treatment under a doctor's supervision.

Stimulants

Stimulants ("Uppers") enhance brain activity, causing an increase in alertness, attention and energy as well as increased blood pressure, heart rate and respiration. These medications trigger the release of chemicals like dopamine in the brain and may cause a sense of euphoria, which may lead to stimulant abuse in order to achieve that feeling. Due to their potential for abuse, stimulants are prescribed by doctors for the treatment of only a few health conditions including narcolepsy, attention-deficit hyperactivity disorder (ADHD) and as a last resort for the treatment of depression. In rare instances, stimulants are used for the temporary treatment of morbid obesity and asthma that fails to respond to more common medications. Examples of prescription stimulants include dextroamphetamine (Dexedrine) and methylphenidate (Ritalin).

Some abuse of stimulants may be misguided attempts to stay awake in order to complete work or school-related tasks, but for some stimulants high doses taken repeatedly within a short period of time can cause hostility or paranoia. Stimulant abuse may also cause dangerously high body temperatures, irregular heartbeat and, in extreme cases, heart failure or deadly seizures.

Treatment: Breaking the Cycle

Just like any other addiction, prescription drug addiction is a brain disease; and, like other diseases, this addiction can be treated. But the natural diversity of individual behavioral patterns, as well as the many different drugs that can result in addiction, make each individual a special case. This may be taken into consideration when incorporating drug treatment into storylines and characters, as it is easy to fall back on stereotypes of the "typical" addicted person.

Treating any kind of drug addiction usually means treating two separate aspects that contribute equally to drug addiction: behavioral aspects and physical components. The behavioral side of addiction can be treated through counseling including individual, group or family therapy, **contingency management** and **cognitive therapies**.

The addiction must often be remedied by addressing the body's physical dependence on the drug. This sometimes means prescribing medications to regulate and relieve withdrawal symptoms, drug cravings, or to treat overdose. Called **pharmacotherapy**, this method is most often misconstrued as merely giving the person a *new* drug (i.e., the debate over administering methadone to treat heroin addiction). Use of these drugs must obviously be closely regulated when dealing with someone addicted to prescription drugs. The medications can also be extremely effective for a successful recovery.

Contingency Management: Offers "vouchers" as a reward for staying drug-free (based on a negative drug test) that can be used to obtain items that promote healthy living.

Cognitive-Behavioral Therapy (CBT): Combines cognitive and behavioral therapies to address the self-defeating behaviors that contribute to addiction as well as how thinking patterns (how you see yourself, your life) can trigger drug use.

The Medical Marijuana Issue: Still Hazy



For years, there has been an ongoing debate about the potential benefits and drawbacks of legalizing marijuana for medical application. Proponents of the legalization of marijuana for medical purposes cite the drug's potentially beneficial side-effects of appetite stimulation, pain relief and the suppression of nausea and vomiting, which could be helpful in alleviating the

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Emerging Trends: VIAGRA

There have been several reports of teenagers and college students abusing the drug Viagra, the popular drug used to combat impotency. Most commonly, Viagra is used at rave parties in conjunction with alcohol or other club drugs. The drug is also being sold illegally on college campuses for between \$25

and \$30 a pill. Viagra has also been associated with ecstasy use as a way to combat male erectile dysfunction often caused by MDMA, the active ingredient in ecstasy. Reports as early as 1998 detail Viagra abuse in London nightclubs. Called "poke" by British youngsters, Viagra was often abused as a substitute for ecstasy or cocaine which were harder to obtain.

Some Commonly Prescribed Medications: Use and Consequences

OPIOIDS	CNS DEPRESSANTS	STIMULANTS
Oxycodone (OxyContin) Propoxyphene (Darvon) Hydrocodone (Vicodin) Hydromorphone (Dilaudid) Meperidine (Demerol) Diphenoxylate (Lomotil)	Mephobarbital (Mebaral) Pentobarbital sodium (Nembutal) Diazepam (Valium) Chlordiazepoxide hydrochloride (Librium) Alprazolam (Xanax) Triazolam (Halcion) Estazolam (ProSom)	Dextroamphetamine (Dexedrine) Methylphenidate (Ritalin) Sibutramine hydrochloride monohydrate (Meridia)
GENERALLY PRESCRIBED FOR	GENERALLY PRESCRIBED FOR	GENERALLY PRESCRIBED FOR
Post-surgical pain relief Management of acute or chronic pain Relief of coughs or diarrhea	Anxiety Tension Panic attacks Acute stress reactions Sleep disorders Anesthesia (at high doses)	Narcolepsy Attention-deficit hyperactivity disorder (ADHD) Depression Short-term treatment of obesity Asthma
EFFECTS OF SHORT-TERM USE	EFFECTS OF SHORT-TERM USE	EFFECTS OF SHORT-TERM USE
Blocked pain messages Drowsiness Constipation Depressed respiration	A "sleepy" and uncoordinated feeling during the first few days, as the body becomes accustomed -- tolerant -- to the effects, these feelings diminish	Elevated blood pressure Increased heart rate Increased respiration Suppressed appetite Sleep deprivation
EFFECTS OF LONG-TERM USE	EFFECTS OF LONG-TERM USE	EFFECTS OF LONG-TERM USE
Potential for tolerance, physical dependence, withdrawal, and/or addiction	Potential for tolerance, physical dependence, withdrawal, and/or addiction	Potential for addiction
POSSIBLE NEGATIVE EFFECTS	POSSIBLE NEGATIVE EFFECTS	POSSIBLE NEGATIVE EFFECTS
Severe respiratory depression or death following a large single dose	Seizures following a rebound in brain activity after reducing or discontinuing use	Dangerously high body temperatures or an irregular heartbeat after taking high doses, cardiovascular failure or lethal seizures, possible hostility or feelings of paranoia

Medical Marijuana, continued from page 3

excruciating side effects that may be caused by chronic illnesses such as cancer and HIV/AIDS, or drugs used for treating these conditions.

While opponents of using marijuana for medical purposes do not deny some of the benefits listed above, they note that the effects of marijuana are unreliable or the drug affects different people in different ways, and that other medications that yield the same results are already commonly available to patients. In addition, smoking the drug is carcinogenic and any form of smoking may have a negative effect on the patient's immune system.

The debate over the medical use of marijuana continues, even as scientists attempt to manufacture a reliable medical-grade drug from chemical extracts of marijuana, as is now done with opium extracts. In the meantime, the use of marijuana for *any* purposes remains illegal in the United States.

On March 28, 2001, the U.S. Supreme Court ruled against the Oakland Cannabis Buyers' Cooperative, a California organization that wants to provide marijuana to chronically ill people. Justice Antonin Scalia stated that, while individual cases may be made for medical uses of the drug, no case can be made for "someone who opens up a business to provide illegal drugs." The Oakland Cannabis Cooperative sought protection from this ruling on the grounds that marijuana is a "medical necessity" but on May 14, 2001 the Supreme Court ruled that marijuana was not worthy of such an exemption.