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Drug Addiction as Demonic Possession

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Drug problems are as old as drugs themselves. Intoxication, violence and social neglect have followed in the wake of alcohol and opiates for thousands of years. Ancient Egypt, Greece, Rome and hundreds of less celebrated societies have experienced the fuzzy end of the drug lollipop. Drug use was just another problem until very recently when addiction came on the scene. Now we are told that addiction has propelled drug use to epidemic proportions and the wolves of debauchery and decay are baying ominously at the gates of civilisation.

Addictive drugs are said to have the unique ability to perpetuate their use by compromising rationality and wreaking havoc on the faculty of self-preservation. They are said to enchant the victim by initiating a molecular-level brain disease. Molecular possession inevitably leads to disorder, dysfunction, perhaps even destruction.

Our response to what we are told is a drug epidemic has been to declare war on it. This follows a long imperial tradition of gunboat social policies. There have already been highly visible wars on cancer, hunger and poverty. These wars have had less than satisfactory outcomes. Cancer, hunger and poverty have barely been bruised, let alone battered. The main enduring effects of these wars are war industries. The war on drugs is one of the biggest. The National Institute of Drug Abuse in Washington D.C. has an annual budget of over US\$500,000,000 and that is only a small part of the total war effort. The US prison system is growing at a much faster rate than the education system. It's all because of addiction.

The war on drugs generates a great deal of passion. It is one of those rare issues that unite people across gulfs of personal differences. John Howard and Normie Rowe stand shoulder to shoulder dredging up the same old and thoroughly discredited clichés. As an indicator of the desperate lack of viable ideas in this area, the FBI is called in. The war on drugs is increasingly taking on the trappings of religion. It has its own saints, sinners and demons. American school children are taught to chant anti-drug mantras. This technique is reminiscent of education during Mao's Cultural Revolution. It should come as no surprise that these programs have been scandalous failures. Indoctrination is not a reliable path to enlightenment. The addiction demon has not been exorcised.

The demonology of addiction permeates our lives. The media are full of terrifying accounts of how addiction has destroyed individuals, families and threatens the very fabric of society. Public affairs programs are replete with images of kids flaked in doorways, and alleys littered with syringes and needles. Worse yet, clean-cut kids from suburbs with tended lawns and Volvo station wagons are portrayed as victims of this new chemical pestilence.

Addiction was once exclusively associated with drugs, but now it has extended its tentacles everywhere. There are reports of addiction to eating, dieting, love, hate, spending, saving, work, laziness, sex, chastity, pain, pleasure and even tap water. Tabloid television continues to contribute to the list of addictions. "I'm a _____ addict!" is a good way to get on the Jerry Springer Show.

Much of the fear and loathing of drugs is related to the notion of contagion. There is a mystical belief that simply being near someone experiencing the ineffable rapture unleashed by drugs may be enough to subvert the innocent bystander. Crack was seriously described as a forthcoming bubonic plague that would devastate the civilised world. End of the world rhetoric notwithstanding, crack use never spread beyond the black ghettos and even there it has changed little in the last decade.

Strangely, there is little evidence that drugs produce anything like the overwhelming and irresistible euphoria dreaded by the public. The vast majority of those who take even the most feared and loathed substances report that they are very nice, little more. The idea of 'one hit and you're hooked' has no foundations in psychology or pharmacology. This common fiction breeds irrational fears and suggests that certain substances really do have demonic powers.

It is also curious that there is little evidence of a drug epidemic. It appears that illicit drug use peaked in the early eighties and has generally been declining fairly steadily ever since. Much the same pattern has been seen with legal drugs such as tobacco and alcohol. It is incorrect and alarmist to interpret the occasional upward movement in the use of one or two drugs as an epidemic. The current epidemic is one of concern about drug use, not about actual drug use.

Increasing numbers of scientists are beginning to question the addiction hypothesis. There are grave concerns as to whether the notion of addiction is well founded or productive. However, the expression of such politically-incorrect beliefs tends to be muted. In academia, such heresy is career suicide. It is seen as tantamount to the

advocacy of pederasty. There is no doubt that drug problems are real, if consistently overstated, but there is good reason to believe that addiction is nothing more than a nightmare that we have created for ourselves. Addiction is a pseudo-scientific form of demonic possession. This, of course, requires some explanation.

To deny that addiction is a valid scientific concept or medical diagnosis is not a blithe denial of drug problems. It is beyond question that there are many shattered and dysfunctional lives in which drugs figure prominently. Nor is an anti-addiction stance a form of drug advocacy. Let these old and feeble cavils be put to rest: questioning the notion of addiction entails full recognition of the scope of drug problems and it has nothing to do with advocating anything other than a bit of sanity.

Given the enormous influence of addiction ideology, it is surprising that the concept has been subject to so little scrutiny. The notion of addiction is commonly treated as an indelible truth with the same weight of reason as the law of gravity. Its sacrosanct status is curious since even a cursory examination reveals major problems at every level of analysis.

The notion of addiction suffers from major conceptual, definitional and empirical problems. These problems have been detailed in the scientific literature but they remain almost totally ignored. If the criticism is misguided, the errors should be exposed. If the criticism is not misguided, it suggests the need for a radical revision in the way drug problems are approached. Instead of resolving these core issues in a rational and informed manner, addiction advocates simply cover their ears and press on. They convene consensus committees that attempt to legislate the truth. The addiction hypothesis is based on assertion and faith, not evidence and logic. The belief in addiction exists, not because of scientific information, but in spite of it. It is old-fashioned demonology, thinly disguised as science.

If addictiveness is a property of certain drugs it should be pretty much the same now and a hundred years ago; it should be the same in Perth or Peru. If any drug is addictive it should be addictive in all places and at all times. *Bona fide* drug properties remain constant. However, addiction does not have even the most elementary constancy. Which drugs are considered addictive varies enormously from time to time and place to place. Authoritative pronouncements on the addictive properties of drugs are frequently reversed as the social climate changes. The political loading here is clear: if drug problems are not mainly due to drugs, they must be due to social factors. This places the blame on the doorstep of Canberra. Shouldering this burden of responsibility is not politically acceptable: it is far easier (read, cheaper) to scapegoat drugs.

Until recently cannabis was considered powerfully addictive. The cult classic "Reefer Madness," once widely used in drug education programs, is now shown in art cinemas as a high camp comedy of the absurd. It has the memorable tagline: "Women cry for it - men die for it." Cannabis addiction is no longer fashionable. Or at least it wasn't until a few weeks ago. Newspapers now suggest that the new hydroponic cannabis may have jumped the rails and once again have become the killer weed of past generations. Just when most of us thought cannabis was fairly innocuous, we are told that it has mutated into a virulent and sinister form. The classic amotivational syndrome, discredited from stem to stern, is once again getting time on tabloid television.

Cocaine was considered harmless not long ago, but now it is said to be one of the most powerfully addictive substances known. Crack cocaine is said to be insanely addictive, capable of erasing the magnetic stripe on your credit cards from a block away. For years health agencies stressed that nicotine was *not* addictive, whereas now they maintain that its addictive properties match those of heroin. There were no scientific breakthroughs that prompted these wild reversals in official attitudes, but there was a lot of political activity.

Addictive labelling has considerable social utility. The same behaviour may be treated very differently depending on the label attached to it. Habitual thieves get jail, kleptomaniacs get sympathy. Dopers get jail, addicts get therapy. Addiction is a social label, not a valid medical or scientific concept. Power politics has transformed a social label into a medical concept, then it ratified the change by calling it a brain disease.

Social theorists are fond of the notion of addiction. It appears to be progressive in shifting blame from the user to the substance. Drug problems were long seen as signs of personal weakness, moral failings, wilful vice. Drug wars were usually just coded means of attacking minorities. Absolving the individual of responsibility seems to bring the matter into the 20th century, guilt free. At one time drug users were seen as evil, now it is the drugs that are evil. We're still dealing with sin. We've replaced old-fashioned guilt-ridden demonology with shiny new guilt-free demonology.

Addiction is based on the belief that certain drugs have a remarkable and unprecedented property. Addictive drugs are said to be able to coerce people into taking them again and again. To do this, the drugs must subvert rationality, cloud men's minds. Lamont Cranston, as the Shadow, had the same mysterious power. In spite of the frequency and authority of the assertion that drugs can subvert rationality, it is empty rhetoric.

That drugs do not subvert rationality is illustrated by heroin. Even sceptics say that if anything is addictive, it is heroin. However, large doses of heroin over long periods of time leave many quite indifferent to the drug. People who take opiates for analgesia report little euphoria, whereas those that take them for euphoria report little analgesia. Many thousands of soldiers in Vietnam were regular heroin users for months, even years. The US army was concerned about unleashing this legion of junkies on society. However, on returning home, the

vast majority of these hard-core 'addicts' simply walked away from the drug. They could say 'no' all too easily. These 'addicts' may even be *less* likely to have drug problems than the general population. This is incomprehensible in the ideology of addiction since it suggests that addiction *reduces* drug problems.

The fact that some can use any drug and remain unscathed, whereas others get into problems with almost anything has led to the notion of an addictive personality. According to this view, the development of addiction requires a pathogen (i.e. drug) and receptive host, someone with an addictive personality. This model follows the well-established bacterial infection model of disease. The notion of an addictive personality has never had much support. People with drug problems do not fall into any distinct personality type. As early as 1945, investigators reported no personality differences between alcoholics and non-alcoholics. Since that time the notion has fared consistently poorly. Miller summarised his review of the addictive personality: "One could conclude from the research that the average alcoholic is passive, overactive, inhibited, acting-out, withdrawn, gregarious psychopath with a conscience, defending against poor defences as a result of excessive and insufficient mothering."

Many see the existence of withdrawal symptoms as proof positive of addiction. There is a widespread belief that the body comes to 'need' certain substances and, when the substances are no longer available, unpleasant consequences follow. Taking the drug reduces the unpleasant consequences and the vicious circle begins. Withdrawal symptoms are said to indicate physical dependence. As with so many aspects of addiction lore, the nature and implications of withdrawal are badly misunderstood. Beneath the superficial reasonableness lies a mass of inconsistencies.

Scores of withdrawal signs have been described. They include: irritability, anxiety, sleep disturbances, moodiness, runny nose, the shakes and even convulsions. However, these symptoms do not occur in many users and even when they do, they rarely last for more than days. In contrast, relapse to drug use may occur months or years after any withdrawal signs have disappeared. Withdrawal signs can not explain relapse, or anything else about drug use.

Drug users have to know what withdrawal symptoms are expected in order to produce them. Clear withdrawal signs often do not follow even long-term heroin use. The image of the junkie writhing in the agony of cold turkey is largely a creation of Hollywood. Few heroin users have ever seen such symptoms. Once again, this is psychology, not pharmacology.

There is another reason why withdrawal can not be an important factor in drug use. Some of the most commonly abused drugs such as cocaine and amphetamine produce virtually no withdrawal symptoms. Conversely, anti-depressant and anti-hypertensive drugs are not abused at all although they often produce heavy-duty withdrawal symptoms. Abuse without withdrawal is common, as is withdrawal without abuse. There is no fundamental association here. There is only a relentless grasping at straws.

Since the ascendancy of the addiction notion there has been little progress made in treating drug problems. In spite of mountains of research, theory and application, drug treatment success rates are so poor that they are rarely even mentioned. Worse, poor success rates are often covered-up. The heavily-funded DARE (Drug Abuse Resistance Education) program in the US has repeatedly been shown to be ineffective or worse. Just the same, the money keeps pouring in. Bad results can always be dealt with by the spin doctors in public relations. This is bad science and worse social policy.

The major reason given by users for their failure to quit is that they think they are addicted. Drug users are widely portrayed as victims of molecular processes beyond their control, devils in their brains. Addiction provides a "vocabulary of motive" which makes the failure to stop, not just acceptable, but expectable. The success of drug cessation programs is limited by a self-fulfilling prophecy.

The definitional chaos surrounding the notion of addiction highlights the weakness of the concept. The extremely broad and variable usage of addiction has deprived it of precision. Addiction is popularly applied to almost any recurrent, motivated behaviour. Even with respect to drug addiction, there is a great deal of confusion. A recent review identified 126 different definitions of tranquilliser addiction alone.

There are hundreds of definitions of addiction, each trying to rectify the glaring inadequacies of the others. Apart from that of the US Surgeon General, two other definitions have become standards: they are that of the American Psychiatric Association (APA) and the World Health Organization (WHO). The relatively wide use of these definitions does not reflect their inherent superiority, rather it reflects the superior marketing muscle of these powerful lobbies.

The Surgeon General lists three primary criteria of addiction. They are: highly controlled or compulsive use; psychoactive effect; drug reinforced behaviour. The analysis below indicates that these criteria are either so vague as to be meaningless or so absurdly over-inclusive as to be useless.

The criterion of controlled or compulsive use does not specify just how much control or compulsivity indicates an addiction. This is a crippling deficiency. Without this specification there is no way of differentiating shooting heroin from drinking coffee, or smoking crack from jogging. Addiction increasingly means whatever you want it to mean. Anything that means everything means nothing. Psychoactive is also an over-inclusive

criterion since virtually every substance we encounter can alter mood. The same criticism applies to drug-reinforced behaviour. Heroin can alter mood and reinforce behaviour. So too can water, aspirin, sugar and dozens of other harmless substances. The Surgeon General does not define addiction at all. His pronouncement is little more than a loose amalgam of ill-defined buzz words.

WHO has attempted to side-step the definitional pitfalls of addiction by dropping the term altogether. They now prefer drug dependence. Unfortunately, this is only a change in the Emperor's clothes; dependence looks suspiciously like addiction and all of the authorities, including WHO, use the terms interchangeably. The semantic shuffle solves nothing. The current WHO definition is: "Repeated use of a psychoactive substance or substances, to the extent that the user (referred to as an addict) is periodically or chronically intoxicated, shows a compulsion to take the preferred substance (or substances), has great difficulty in voluntarily ceasing or modifying substance use, and exhibits determination to obtain psychoactive substances by almost any means. Typically, tolerance is prominent and a withdrawal syndrome frequently occurs when substance use is interrupted. The life of the addict may be dominated by substance use to the virtual exclusion of all other activities and responsibilities."

The WHO definition suffers from all of the inadequacies of that of the Surgeon General plus a few of its own. First consider the criterion of repeated use. Addiction is supposed to account for repeated use, so including it as a criterion of addiction is circular reasoning. This fundamental logical error is as common as it is wrong. Next is periodic or chronic intoxication. Virtually all drinkers become a bit intoxicated from time to time; does this mean they are addicted? The next two points, compulsion and difficulty in stopping, are just variations on the repeated use theme and are circular and inappropriate. It is strange to use tolerance in a definition of addiction since we become tolerant to light, sound, sugar, salt and a thousand other things. Lastly is the presence of withdrawal signs. The inappropriateness of this criterion was discussed above. There's nothing left. This is another empty definition, replete with authority, nothing else.

The definition presented in the Diagnostic and Statistical Manual (DSM-IV) of the American Psychiatric Association is a combination of those offered by the Surgeon General and WHO. As such, it suffers from a host of problems. There is one significant element of the DSM-IV definition that is not present in the other members of the big three. The American Psychiatric Association stresses that the substance must result in harm to the individual or society. This criterion suggests that the authors have a social conscience, but it creates more problems than it solves.

Humans are irrational in many respects. In spite of a barrage of warnings about sunlight, dietary fat, sugar and salt, we continue to expose ourselves wantonly to these agents of death and destruction. Use despite harm is not an indicator of addiction, but of human frailty and the ineffectiveness of fear in changing behaviour. The "stop it or you'll go blind" rhetoric is becoming increasingly ineffective. The vast majority of drug users think that any harm associated with their drug of preference will happen to someone else, not them. Everyone who drives a car or turns on a light harms the environment. Are these persistent and harmful behaviours addictions?

There is an attempt to disguise the essential inadequacies of definitions of addiction by dragging in social science jargon. Terms such as craving and psychological dependence are common currency. When does wanting become craving, or needing, or a dependency? There are no criteria for making these crucial distinctions. Since the social science jargon is at least as vague as the notions of addiction, it further hobbles already limping definitions. Current definitions of addiction are fundamentally inadequate and the problem is made worse by trying to prop them up with jargon that is even more poorly specified.

The combined efforts of thousands of legislators and scientists for generations have not produced a definition that is even remotely satisfactory. This utter lack of progress is unparalleled in science. Moreover, the situation is, if anything, getting worse. If, as it seems, addiction can not be defined, then those who use the term do not know what they are talking about. Alternately, everyone knows what *they* are talking about, but not what anyone else is talking about. Addiction is a tower of babel.

In an attempt to deal with persistent definitional problems, the American Psychiatric Association has adopted a checklist approach. This approach is undeniably flexible, but it creates serious problems. For example, an automobile may be defined as having four of the following characteristics: windscreen wipers, headlights, seat, wheels, engine, transmission, instruments and an exhaust system. An object with four of these characteristics might be a car, but it could also be a Boeing 747, a lawn mower or an oil derrick. The same applies to using this approach to define addiction. It allows almost anything to be considered an addiction. It is subjectivity masquerading as objectivity.

There can be little objection to the loose everyday use of addiction. However, any definition with major implications for treatment, social policy and litigation should have a degree of precision at least comparable to that of other major diagnostic categories. For addiction, this sort of precision, or even a rough approximation thereof, is not available. Authoritative definitions such as those of the Surgeon General and WHO give an illusion of precision that vanishes under the slightest scrutiny.

The one common element of definitions of addiction is reference to the problem use of something. The futility

of this may be illustrated by the following dialog:

"Why does he keep using drugs?"

"Because he's addicted."

"How do you know he's addicted?"

"Because he keeps on using drugs."

Addiction is not a definition, but a restatement of the problem. Circular definitions go nowhere, which is where this problem has been going for a long time.

In an attempt to break the futile circle of definitions, scientists have devoted an enormous effort to investigating mechanisms in the brain. If something in the brain could be found which turned compulsive drug use on or off, the argument would be conclusively resolved. Such findings would establish addiction as genuine and sceptics would be banished to the wilderness overnight. The head of the National Institute of Drug Abuse maintains that such evidence is already in. Such an extravagant claim merits close inspection.

Drugs have many effects on the brain. The question is whether any of these effects perpetuate drug use. Are they the neural basis of addiction? At the moment, the hot candidate is the release of dopamine in a brain area called the nucleus accumbens. Cocaine and heroin release dopamine in this area and this has been widely heralded as the neural basis of addiction. However, the hosannas are clearly premature. Hunger, eating, thirst, drinking, sex, pain and all sorts of harmless everyday events also release dopamine in the nucleus accumbens. Dopamine release in the nucleus accumbens is not the neural basis of drug addiction in spite of claims to the contrary.

Whereas brain research has greatly increased our understanding of many conditions, problem drug use is not one of them. There is a vast amount of information, much of which is interesting, perhaps even important, but putting it together to unravel the riddle of problem drug use is still a long way off. Current concepts and data are just not ready for prime time. Addiction advocates make inappropriate use of unsubstantiated brain mechanisms to validate their unfortunately unsuccessful efforts. This is neuromythology.

The addiction argument rests heavily on data from animal experimentation. Advocates of animal experimentation maintain that the essential features of human drug taking may be represented in laboratory species. The validity of animal models of addiction is increasingly doubtful. Human drug taking is influenced by many factors that have no meaning for animals. Imagine a rat turning to alcohol because it has lost its job, or a monkey using cocaine to improve its sex life, or a chimp shooting heroin in order to be accepted by its friends. The major factors in human drug use have no parallels in lab species. It is questionable whether animals could correctly be said to 'abuse' drugs. If a rat was stoned all the time, would it lose its job, be evicted, shunned by its peers, or feel the long arm of the law?

When given any choice, even animals that have been forced to take drugs for a long time choose *not* to take drugs. Equally damaging are findings that laboratory animals will take many drugs that humans don't like at all. Conversely, laboratory animals are indifferent to or actually dislike alcohol, cannabis, tranquillisers and other drugs that humans like a lot. There is no animal model of addiction, yet the vast majority of addiction research continues to use animals and talk about them as though they were addicted. This approach is about as valid as using animals to study music appreciation.

Significantly, heroin use among Afro-Americans in New York has recently plummeted. This reduction in drug use is not due to any treatment, but to changes in fashion. There is an important moral in this. Drug use is more a problem of psychology than pharmacology. It is irrational to blame behavioural problems on mythical drug demons. As long as we pursue demons, the real determinants of drug use will remain a mystery. It is impossible to start with a weak concept, add definitional chaos, make this hopeless amalgam a quasi-religious belief structure and expect to have a viable end-product. Even politicians can't make this one work.

If it's not addiction, why do people do dumb and destructive things with drugs, gambling, sex, and a thousand other things? Quite simply, we don't know. There is undoubtedly no single reason to account for such a diverse group of self-destructive activities. However, there is one certainty. Invoking an invalid phantom like addiction is unlikely to help. Science is about escaping from the demons that haunted our ancestors, not embracing them.

Irrespective of authoritarian pronouncements, the belief in addiction is no more rational than the belief in demonic possession or brain karma. The fact that addiction is couched in scientific terminology does nothing to disguise its fundamental inadequacies.

As the great social luminary Kinky Friedman once said: "When the horse is dead, get off." Addiction is a dead horse, yet a lot of cowboys are still trying to ride off into the sunset on it.