

DISPELLING DRUG MYTHS

THE PRESENTATION TO BE MADE BY

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It is perhaps surprising that myths should arise about the chemicals that we call drugs. One might expect that modern science with all its expertise, equipment and knowledge would be able to predict and describe exactly what will happen when a given chemical enters that human body. Indeed we do know what happens with most drugs when they are tested under scientific conditions.

However when drugs are used on the 'street' they are taken in ways, in quantities and in combinations which differ enormously from normal medical use, by individuals who differ in age, gender as well as physical and psychological make up from one another. This complexity makes it difficult to establish exactly what is happening in and to the human body leading the development of a large number of myths concerning different drugs.

The myths I wish to examine are

1. the myth the 'drugs don't jump up and bite you'
2. the myth of accidental addiction
3. the myth of safe heroin
4. the myth of impurities in ecstasy
5. the myth that water makes ecstasy safe

MYTH 1: DRUGS DON'T JUMP UP AND BITE YOU.

Unfortunately drugs do jump and bite you! By definition drugs cause huge changes in brain structure and chemistry as well as physical changes affecting other organs in the body. As a result drug users run the risk of a whole range of drug related problems i.e. problems which are a direct result of the interaction between the drug and the human body.

Drug-Related Problems

Sometimes there is a tendency to view the risks of drug taking in very narrow terms. There is an emphasis on addiction, overdoses and more recently on HIV and AIDS. Such an emphasis could be misleading, both in terms of evaluating the harmfulness of a particular drug and also in relation to attempts to respond constructively to problem drug taking. It is necessary therefore to take a very broad view of what constitutes a drug-related problem and to include under this heading, not just the obvious addiction etc., but also the concepts of drug related disease, drug-related crime, drugs in pregnancy, the effect of drugs on learning and work, on accidents and on behaviour.

Addiction

Addiction, or to give its jargon term, drug dependence, is the compulsive use of a drug on a regular basis in order to experience its psychoactive effects or to avoid the discomfort of its absence. There are different types of dependence, i.e. dependence of the opiate type, dependence of the alcohol type and so on. Many drugs result in compulsive use after repeated exposure to them. Examples include heroin and other opiates, alcohol, tranquillisers, nicotine, cocaine.

Sometimes the dependence is physical, sometimes it is psychological. The latter is the most difficult to deal with.

Addictive use is the most serious problem a drug user can face because it often means daily exposure to the drug. However some drugs are not particularly addictive, e.g. LSD, but that does not make LSD a 'safe' drug. Equally, it is possible to use an addictive drug on a regular basis but not be addicted to it. Alcohol is a good example where most alcohol users are not addicts but still are at risk from a host of medical, legal, social and other problems.

Overdose and Sudden Death

Another classical way of assessing a drug is to ask does it result in death if you overdose on it. Some drug, e.g. heroin, cocaine, alcohol, are lethal in overdose. Others can cause sudden death, for example, solvents in glues, aerosols and gas canisters, and above all MDMA or 'Ecstasy'. On the other hand there are drugs such as cannabis and LSD which have never killed anyone in overdose.

Drug-Related Disease

The well-recognised link between drug abuse and HIV transmission is just one facet of drugs and disease. It is an aspect of what is called Technique-Specific Disease, i.e. disease related to the way the drug is used rather than a particular drug. Specifically it is due to the injection of drugs using shared contaminated needles, syringes, mixing bowls - what addicts call the 'works'. It does not matter what drug is injected - it could be heroin, it could be amphetamines, it could even be anabolic steroids by body builder - as long as there is sharing of equipment, there is the risk of sharing not just HIV but also all of the Hepatitis virus (B, C and D), blood poisoning, abscesses, gangrene and so on.

A second aspect of drug-related disease is one that is often neglected, namely, Substance-Specific Disease. That is disease caused by the direct toxic effect of the chemicals on different parts of the body. Examples include:-

Brain and liver damage	-	Alcohol
Lung and heart disease	-	Tobacco and Cannabis
Strokes and heart attacks	-	Cocaine
Heat-stroke and liver damage	-	Ecstasy

In addition we should take into account the acute psychoses which can be triggered by cannabis, the depression due to chronic ecstasy use and the more prolonged mental illness which can be precipitated by LSD.

Drug and Pregnancy

If a pregnant woman is using drugs, the foetus in her womb will also be exposed to the drug at key and vulnerable stages of its psychical and mental development. The results can include babies born addicted to opiates, physical abnormalities related to cocaine and alcohol, retarded intrauterine growth and development due to exposure to alcohol, tobacco and cannabis.

Drug and Learning

One of the most consistently reported effects of the use of any of the cannabis group of drugs, i.e. herbal marijuana, resinous hash or the distilled hash oil, is a

damaging effect on short-term memory and learning ability. Evidence has accumulated from laboratory studies where cannabis disrupts all tests of learning ability, from surveys of young cannabis users who are still impaired six weeks after becoming drug-free and from surveys of adult daily users who overwhelmingly report memory and concentration difficulties.

Drugs and Accidents

The major culprit in this category has to be alcohol and the recognised scale of the problem needs little further comment from me. In addition, other drugs can cause accidents, including tranquillisers and in particular cannabis. In many countries cannabis use is now recognised as a major cause of injuries and deaths in car truck and rail crashes. In one U.S. study of fatal truck crashes, younger drivers tended to have detectable levels of cannabis in their blood while alcohol was predominant in older drivers. It is perhaps surprising that cannabis and alcohol appear at the same percentage frequency in such accident victims.

Drug and Behaviour

For many drug users, it is the changed behaviour under the influence of the drug which can be the most damaging aspect of their drug use. A good example of this is the violence associated with alcohol. The confused drunken behaviour associated with solvent is often the major risk for most youngsters involved in solvent abuse. Particularly worrying is the delusional behaviour resulting from LSD use given the increased popularity of this drug in 'Rave' setting. With cannabis the development of an apathetic negative outlook and attitude can be particularly destructive for many young people.

Drug and Crime

There is a widespread perception that drug use is associated with both violent and acquisitive crime. There is no clear-cut explanation for this perception because it is clear that no drug is inherently criminogenic. Most people associate the expression 'drug-related crime' with acquisitive crimes carried out by opiate addicts to obtain money for their next 'fix'. Street heroin is expensive and addicts do commit robberies to obtain money for drugs. Violence and threats of violence are used in the course of robberies but generally speaking heroin and other opiates tend to reduce aggressive violence tendencies rather than create or release them. The link between opiate abuse and crimes against property may not be totally valid according to the findings of research studies. There is no doubt that the high cost of street opiates is a major factor in the criminal careers of many addicts. However Inciardi and McBride have reviewed much of the American literature and noted that among the majority of street users who are involved in crime, their criminal careers were well established prior to the onset of drug use. The MSRB study of heroin users in Dun Laoghaire (1984) stated that 61% of the heroin users in that area had been arrested for crimes before they began to use the drug.

More recently, Ramsay, writing in the magazine DrugLink (July / August 1994) about the situation in Britain, noted 'that there are few grounds for linking the growth in recreational drug use with increasing property crime'. Other U.K. researchers in this area have said that 'most crime is not committed by drug

users at all' and that acquisitive crime is only one of a variety of funding sources available to an addict. The most up-to-date study on the cost of heroin-related crime was performed by a group led by Baker from the Institute for the Study of Drug Dependence in London. A summary of their findings was published in DrugLink in November 1994. In this report the authors challenged the calculation that half of acquisitive crime in England and Wales was committed by opiate or cocaine addicts. They found that heroin users in England and Wales raised between £58 million and £864 million from acquisitive crime in order to purchase heroin. This estimate amounts to between 1 and 21 percent of the total cost of acquisitive crime in England Wales. They point out that the data are very poor leading to a wide variation. However it is striking that large though the figures undoubtedly area, that vast majority of property crimes in the U.K. are not committed by heroin users! Information from the Netherlands and from Norway shows that welfare payments and drug dealing are more significant than robbery as sources of money for drug users in these countries. We urgently need accurate information about the life styles of Irish drug users to understand how they finance their drug use. Inaccurate information about the levels of drug related crime could wrongly increase the concern of local communities about the risk of local treatment facilities bringing, what they wrongly perceive to be drug-crazed criminal into their areas.

Drugs and Violent Crime

One of the U.K. reports on drugs and crime also noted the strong link between smokeable cocaine ('Crack') and violent crime. This is probably due to the paranoia which results from the prolonged use of stimulants such as cocaine and the amphetamine-type drugs thus triggering extreme violence. At the present time, given the use levels of such drugs, these are potential risks as are the risks of violence resulting from the disinhibiting effects of some tranquillisers, e.g. temazepam and flunitrazepam prescribed for some opiate users.

Alcohol and Violence

A much more real risk of violence is associated with a more mundane drug, namely alcohol, the Royal College of Psychiatrists in the U.K. estimated that alcohol was involved in up to 50% of murders and up to 70% of assaults. In an analysis of more than 9,000 violent crimes reported from 11 different counties, Murdoch and co-workers found that nearly two-thirds of violent offenders were drinking at the time of the crime. They report that it is now widely accepted that alcohol has a direct and dose-related effect on aggression in humans with a particularly strong relationship between alcohol consumption and martial violence.

MYTH 2: ACCIDENTAL ADDICTION

One of the questions I am most frequently asked by parents concern the risk that their children could be given a drug in a sweet, in a drink or in the from of the transfer to be applied to the skin. They are frightened that the child will then become hooked for life.

believe that this is unlikely for a number of reasons. Many drugs e.g. heroin are not particularly effective when taken by mouth. Part of the attractiveness of heroin is the speed at which the euphoric effects (the 'hit', 'buzz', 'rush') start when the drug is injected or smoked. Taken in a sweet or drink the effects would be much slower and less powerful so that there would be less incentive to repeat the experience.

In any event, instant addiction is rare to non-existent. Addiction is a chronic relapsing condition which takes time, money and repeated exposure to the drug in order to develop. Few, if any addicts become addicted without an awareness that they are progressing from experimentation though occasional use into that they are progressing from experimentation through occasional use into compulsive addictive use. Some drugs are difficult to dissolve and disguise because of their taste and other e.g. LSD or 'acid' would have such frightening mental effects if taken unknowingly, that nobody would ever wish to repeat the experience.

MYTH 3: 'SAFE' HEROIN

It is believed that there has been a large increase in heroin smoking in the past year or so, a characteristic we share with Belgium, Denmark and Sweden. It appears that some young people have been fooled into using heroin to smooth out the high from MDMA and they have also been told (it would appear) that if they don't use a needle that there will be no problem. Firstly heroin is not a particularly useful 'downer', and secondly, as many heroin smokers have discovered the hard way, you don't have to inject heroin to end up with a heroin problem. Heroin is heroin whether you inject it, swallow it, smoke it or snort it. It is a highly addictive poison and will always be highly addictive poison even if it were 100 percent pure. In addition one must express concern over the possible effects on the lung of chemicals from heroin smoke as well as worrying about the heroin itself.

MYTH 4: IT IS THE IMPURITIES IN ECSTASY WHICH ARE DANGEROUS

Much of the discussion about the health effects of MDMA and the related drugs MDEA and MDA sold as 'E' or 'Ecstasy' has centred on the role of impurities in the toxicity of these drugs. This is a dangerous myth because it suggests to young ecstasy users that if the drug were pure it would be safe. The reality is that the drug itself is the problem because it can kill through causing heat-stroke or through an effect on water balance leading to water intoxication. We are beginning to learn that some people are at risk from the short term effects of the drug because they are slow metabolisers i.e. they break the drug down slowly. Others are fast metabolisers who appear to be at risk of damage to the liver and heart and of degeneration of certain key nerve cells in the brain leading to depression.

No amount of purification of the drug will minimise or eliminate those effects. In any event, no evidence of ground glass, rat poison, or heroin has been found in samples from Ireland, U.K., U.S.A. and South Africa. Substitutes such as

ephedrine, ketamine and amphetamine are sold as rip-offs but by and large what is sold is one of the three genuine drugs.

The related myth that half a tablet is safe can also have tragic consequences apart from the fact that taking an ineffective half dose of a drug can give no guarantees about the safety of a full dose.

MYTH 5: DRINK PLENTY OF WATER WITH AN 'E'

Much attention has focused on deaths from heat-stroke after MDMA, even though people have died for other reasons, e.g. as a result of delusional behaviour, from heart attacks and from asthmatic attacks. The combination of the direct effect of the drug on body temperature and the heat generated by rave dancing can be lethal.

In attempting to reduce the level of such deaths, MDMA users were advised to drink as much water as possible. This advice has had disastrous consequences because deaths from water poisoning have occurred due to the way the drug causes the brain to release a hormone which shuts down the kidneys even though there is plenty of liquid in the body. This effect known as SIADH (Syndrome of Inappropriate Anti Diuretic Hormone) is also known to occur with other drugs including the antidepressants. Because the kidneys shut down, the excess water in the body is absorbed by brain cells which lose vital sodium and also swell in the process. This swelling leads to coma and death.

As a result the harm reduction message has had to be changed to tell users to sip no more than 1 pint of water every hour, or better still to drink fruit juice or an isotonic sport drink which would replace the salt as well or better still don't use the drug at all. It may not be fashionable to say it but if you don't want a drug problem don't take the drug!

While these are many drug myths the BIGGEST MYTH OF ALL is that drug use is inevitable and that we as a community are powerless to deal with it.

We are not powerless. As many in this audience have shown, it is possible to reduce the supply of drugs and it is possible to reduce the demand for drugs in our city.

Chemical intoxication is neither safe, normal nor acceptable no matter what the chemical or what the age group. That is the message which I will continue to deliver wherever and whenever I can.