

# 10. Tranquillisers and Barbiturates

(2021 version)

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## Tranquillisers - Introduction

The oldest group of tranquillisers were based on a substance first discovered in the late 1800s. They were used to treat a wide range of nervous disorders and to help induce sleep. Chemists went on to try and develop a safer drug and it was a group in the US headed by the Swiss chemist Leo Sternbach who discovered benzodiazepines. When we discuss tranquillisers we are normally referring to benzodiazepines and the Z-drugs.

They are used in medicine as:

- sedatives to treat restlessness, tension and anxiety.
- hypnotics or sleeping pills for the treatment of insomnia.

- muscle relaxants.
- a pre-surgery sedative to relax patients before an operation.
- treatment to ease alcohol withdrawal symptoms.
- anticonvulsants for treating certain types of epilepsy.

### Z-drugs

Zolpidem, zopiclone and zaleplon are non-benzodiazepine hypnotics that act in a similar way to the benzodiazepines. Dependence has been reported and they should not be used long-term or given to people with a history of drug problems.

## How They Are Taken

They are usually taken in the form of tablets and capsules. Some users inject benzodiazepines, crushed and dissolved in water, which heightens the effects of the drug. Some of the street names for benzodiazepines are:



· Jellies	· Moggies	· Benzos	· Eggs
· Norries	· Downers	· Rugby balls	· Vallies
· Mazzies	· Roofies	· Blues	

## Health

Benzodiazepines are depressants and have become the preferred hypnotic and sedative drugs because it was thought that there were fewer adverse effects, less interaction with other drugs, and less potential for misuse than for other drugs, particularly barbiturates.

Benzodiazepines are categorised according to how long their effects last. Some types of long-acting benzodiazepines are: chlordiazepoxide, diazepam – Valium® (no longer sold as Valium in the UK), flurazepam and nitrazepam. Their use has decreased in favour of intermediate-acting benzodiazepines. Some types of intermediate acting are lorazepam, oxazepam and temazepam. Benzodiazepines are only available on the NHS as the generic version, although drug users may still refer to them by their brand names.

Compared to the long-acting drugs they are less likely to cause drowsiness the following day, but they have an increased risk of dependency.

The positive and negative effects of these drugs start 10-15 minutes after taking them and can last for up to 6 hours. Their effects are:

- calmness and relief of anxiety and tension
- comedown from drugs such as cocaine or amphetamines
- drowsiness
- light-headedness
- nausea
- confusion
- release of inhibitions (similar to alcohol): people become talkative and excitable, hostile and even aggressive
- slight loss of co-ordination (risk of accidents)
- taken together with alcohol the effects are dangerously heightened
- injecting benzodiazepines can cause permanent vein damage and may include the risk of HIV infection when sharing equipment

Benzodiazepines can also be used as to manage withdrawal of opioids.

People who use benzodiazepines may behave as if they were drunk, losing their inhibitions. They may also be confused and unable to concentrate on what is happening around them. They may also just be very calm. In the long term, there are very few effects apart from tolerance, dependence, and withdrawal symptoms, should someone choose to stop taking them.

## Dependence

As benzodiazepines have only a slight depressive effect on the central nervous system there is an increased risk of dependence but only with long-term use. Dependence can be psychological as well as physical. Some indicators of dependence are:

- continued use of pills for over 6 months.
- mixing the drug with alcohol or other drugs.
- the drug is interfering with life, with relationships - socially or at work.
- taking more than instructed / getting extra pills from elsewhere.
- asking for a higher dose.
- irritability, sleeplessness, aching muscles.
- feeling sick and anxious without the normal dose.

## Tolerance

Regular users often find that these drugs become ineffective in giving the desired effect after a time. Continual use may mean they become ineffective as sleeping pills after 2 weeks and ineffective to combat anxiety after 4 months. The temptation is then to increase the dosage. They are only really effective as short-term medicines for 2-4 weeks, but many people are dependent and have been taking them for several years.

## Withdrawal

Withdrawal symptoms are worse with intermediate-acting benzodiazepines and with long-term use. Particular problems may occur when the supply is suddenly, rather than gradually, stopped and withdrawal symptoms can differ from user to user. The withdrawal symptoms are similar to those of alcohol and barbiturates and may include:

- insomnia
- anxiety including panic attacks
- loss of appetite and body weight
- nausea
- tremors
- perspiration
- perceptual disturbances
- abrupt withdrawal could produce confusion, convulsions and psychosis

## Benzodiazepines and pregnancy

Babies born to mothers addicted to benzodiazepines during pregnancy may be physically dependent on the drug and show withdrawal symptoms after birth. Tranquillisers can also lead to birth defects and behavioural problems in babies.

## Women and tranquillisers

The following points are some of the reasons that have been suggested to explain why women seem to be more likely than men to use this group of drugs:

- For a man it is socially acceptable to drink in a pub several nights a week as a way of relaxing and combating stress. Although women's drinking has increased over the recent years, it is still often seen as irresponsible for a woman to mirror this behaviour.
- Many women find themselves working full-time and caring for a family, this combined stress makes some women turn to external sources to help them cope.
- Women are more likely to seek help from doctors when they feel they aren't coping.
- Doctors may prescribe benzodiazepines as a means to aid relaxation and prevent anxiety. Some women misuse them as a means of escape and to bottle up their feelings.

## The Law

There is no known illegal manufacture of tranquillisers as their complex chemical structure would make this difficult, but in recent years prescribed or stolen tablets have found their way on to the street market selling for as little as 25p a tablet. Benzodiazepines and zolpidem are Class C drugs, Schedule 4. In June 2014 zopiclone and zaleplon were reclassified as class C, schedule 4 controlled drugs.

# Barbiturates - Introduction

Barbituric acid was discovered in 1864 by combining urea and malonic acid. It was the first known substance to induce sleep and since 1903, a large number of barbiturates have been manufactured. As with many drugs that are now controlled, when they were first discovered it was thought barbiturates were perfectly safe with no side effects. Only a small proportion of the hundreds of drugs based on barbituric acid have been generally prescribed. Though they were widely used, being thought of as having clear medical and psychological benefits, their potential for dependence increasingly became a matter of serious concern.

## How They Are Taken

Barbiturates are usually swallowed as tablets or capsules in various sizes and colours. Although the more common types are easy to identify, only proper laboratory analysis can identify the content of capsules that are distributed illegally. As with ecstasy, the content of a capsule may be replaced by another substance.

Barbiturates may also be injected by diluting the powder of opened capsules or crushed tablets.

Some of the common types of barbiturates are:

- Amobarbital (Amytal - street names: angels, birds, blue heavens)
- Butobarbital (Soneryl)
- Secobarbital (Seconal - street names: reds, red devils, red birds)
- Quinalbarbitone & amylobarbitone (Tuinal® - street names: rainbows, reds and blues, double troubles). These two are the old (UK) names for secobarbital and amobarbital. According to the EU, the recommended international names must now be used instead.

Some of the other general street names are:

· Barbs	· Candy
· Sleeping pills	· Peanuts
· Sleepers	· Goofballs
· Downers	

The misuse of barbiturates is now very rare.

## Health

Barbiturates are depressants. They depress the physical function of the brain and other parts of the central nervous system including mental activity and alertness, and they can vary extensively in effect, duration and toxicity.

Barbiturates can act as sedatives, used to decrease anxiety and tension because of their depressant characteristics. They can also act as hypnotics, drugs which

are used to help sleep. Most barbiturates have both actions, being sedative when taken in low doses and hypnotic when taken in high doses.

Barbiturates are categorised according to how long their effects last. This depends not only on the drug but also on the time the body takes to eliminate it through the kidneys and the liver.

Long-acting barbiturates produce from 1 hour to 10 hours of sleep and usually result in a hangover with impaired skills and spoiled concentration. They are prescribed for nervous insomnia, some forms of epilepsy and mental disturbances, and misuse of this type of barbiturate only happens occasionally (e.g. phenobarbital).

Intermediate-acting barbiturates are the most likely to be misused. Their effects start within 15-30 minutes and last from 2 to 8 hours, and are much less likely to produce hangovers. They were prescribed for people who had trouble sleeping and for treating anxiety and convulsions before operations. Today their use is restricted to the treatment of severe insomnia in patients already taking barbiturates (e.g. secobarbital, amobarbital).

Very short-acting barbiturates are only used in hospital. They are injected in order to produce an almost immediate anaesthesia of short duration and to control convulsions (e.g. thiopental).

## Short-term effects

The positive and negative short-term effects of taking minor doses are:

- relief from fears, worry, tension and anxiety
- feeling sociable, happy and relaxed
- mental confusion
- user may appear drunk e.g. slurred speech
- risk of HIV and hepatitis from injecting

The short-term effects of taking higher doses are:

- slurred speech
- loss of co-ordination leading to risk of accidental injury
- mental and emotional confusion
- increased risks because of the narrow margin of safety for overdoses

## Long-term effects

- Respiratory problems (users are more prone to bronchitis and pneumonia).
- A continued risk of overdose.
- Serious, sometimes fatal, withdrawal symptoms (e.g. trembling, temperature and heart rate rise, nausea, dizziness, terrifying)

hallucinations and convulsions). Sudden withdrawal from high doses can be fatal.

- Injecting can lead to permanent damage of the veins (such as abscesses and gangrene) by particles of undissolved material.

Users of other drugs, who may turn to barbiturates include: opiate addicts who are unable to obtain their usual supply who take them to ward off withdrawal symptoms; alcoholics trying to give up alcohol who take them to counteract DT's (delirium tremens); LSD and amphetamine users trying to calm down from the effect of their 'trip'.

People using barbiturates often behave in a relaxed and sociable manner, but may be quite sleepy or unable to keep up with conversations. If they have taken a high dose, they can be hostile or anxious.

## Barbiturates and pregnancy

If a woman uses barbiturates in the later stages of her pregnancy, there is a risk the baby will experience withdrawal symptoms when it is born.

## Dependence

Barbiturates are physically and psychologically addictive. Dependence can be even more serious than opiate addiction with worse withdrawal symptoms.

Barbiturates were freely prescribed by doctors, particularly during the 1950s and 1960s. The dangers were eventually highlighted by the growing addiction problem, and the large number of people who died from barbiturate overdose.

## Tolerance

Tolerance occurs with repeated use and is more likely with the intermediate-acting barbiturates.

## The Law

Until 1985 barbiturates were simply classed as prescription-only medicines, and possession itself was no offence. They are now listed as Class B, Schedule 3 drugs.

## **Tranquillisers and Barbiturates Statistics**

Last updated December 2020

Use of tranquillisers

In the last year, 0.5% of 16-59-year-olds have reported using tranquillisers and 0.8% of 16-24-year-olds have reported using them also. In 2010/11, 0.4% of 16-59-year-olds reported using tranquillisers in the last year. In that same year, 0.7% of 16-24-year-olds reported using tranquillisers.

(ONS Drug Misuse in England and Wales, 2019/20)

There were 399 deaths in England and Wales in 2019 from benzodiazepine use.

(ONS Drug Misuse in England and Wales, 2019/20)

### Use of Barbiturates

Concern about the number of accidental and deliberate overdoses from prescribed barbiturates led to a campaign amongst doctors in 1975 to warn people of their dangers. The campaigning group of doctors estimated that 27,000 people had died using barbiturates between 1959 and 1974. Medical prescribing fell to 5.1 million prescriptions in 1978 and continued downwards in 1996. Doctors switched to prescribing minor tranquillisers instead.

There have been some recent isolated reports of the use of barbiturates in clubs possibly by users of amphetamines and ecstasy to bring them down from the high.

(Drugwise, 2020)