Ketamine factsheet

Ketamine is an anaesthetic with analgesic and psychedelic properties chemically related to phencyclidine (PCP, angel dust). It has recently become clear that ketamine has a significant recreational usage in the UK. This factsheet is intended to give professionals basic information about the drug and its use. For more phone ISDD's information service on 071 430 1993 and ask for their ketamine factsheet, of which this is a condensed version (the full version is referenced). The information service can also provide further information extracted from ISDD's library.

Like PCP, ketamine is a 'dissociative' anaesthetic: patients feel detached and remote from their immediate environment. Ketamine also induces a cataleptic state of muscle rigidity: a patient placed in one position cannot subsequently move themselves until the effect has worn off. Together these properties made ketamine very useful in emergency surgery – it was used widely during the Vietnam War.

The key to the ketamine experience in sub-anaesthetic doses is dissociation: users say that under its influence, they assume a different point of view, outside of body and self. Because of this, some psychotherapists have experimented with ketamine to test its potential as a psychotherapeutic tool. Ketamine first appeared as a street drug in America during the early seventies in a variety of forms ranging from its liquid pharmaceutical state for injecting through to pills to be taken orally, powders intended to be sniffed up the nose, and a formulation for smoking.

The 'normal' dose for sniffing ketamine is about 60-100mg. Used intravenously or intramuscularly, a sub-anaesthetic dose would be around 1-2mg per kg of body weight.

Ketamine in Britain

Ketamine is not controlled under the Misuse of Drugs Act, and possession is not a criminal offence. It is, however, a Prescription Only Medicine under the Medicines Act, meaning unauthorised supply is illegal, but the maximum penalties are relatively mild compared to those of the Misuse of Drugs Act.

Reports of ketamine's recreational use have been geographically widespread from southern England to Scotland and its users appear to span the social spectrum from street to stately home. Prices range from £6-£25 for a wrap of powder, though this may not always be ketamine. Ketamine appears to have emerged from the same dance culture which has embraced ecstasy. The drug's appeal may derive from its chemical similarity to PCP with its well-documented capacity to put users into 'overdrive' – presumably 'useful' for all night dancing.

It is too early to say whether illicit supplies have been illicitly manufactured from scratch or reformulated from licitly manufactured supplies diverted from hospitals and/or vets. However, one report suggests that currently street ketamine derives from licit sources; 'diverted' liquid

The author is less

is heated to evaporate the water, leaving

ketamine crystals.

by Harry Shapiro

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Physical and psychological effects

Ketamine takes effect over varying time periods depending on the route of administration – from 30 seconds for intravenous injection to 20 minutes taken orally – and the effects can last up to three hours. Reported physical effects include an initial cocaine-like 'rush', vomiting and nausea, slurring of speech and vision, numbness and ataxia (irregular muscle coordination). In one case, an intravenous ketamine user was admitted to hospital suffering from unusual tongue and neck movements which left him unable to speak. Others have reported a temporary paralysis.

Aside from the risks of injecting common to all drugs, it is ketamine's anaesthetic properties which pose the main physical dangers. Under its influence, users are less likely to feel pain; combined with the fact that some might not realise they are hallucinating (because they believe what is happening is real), there is the potential for serious injury. As with any anaesthetic, eating or drinking in the hours prior to use could cause vomiting; because of the risks of choking, this could be particularly dangerous if too much is taken and the user falls unconscious. If the dose exceeds the standard surgical dose, then there is the risk of respiratory collapse or heart failure. However, ketamine deaths appear to be rare; only one case is cited anecdotally in the literature with no precise reference given.

Psychological effects. Users report that although ketamine's psychological effects come on and recede faster than with LSD, these effects are similar including hallucinations, synaesthesia ('seeing' sounds and 'hearing' colours), euphoria, depersonalisation and confusion, plus the powerful dissociative or 'out-of-body' (flying or floating) sensations which appear specific to ketamine. As with other hallucinogens, whether the user has a 'good' or 'bad' experience is often determined by the user's expectations and the environment in which the drug is used. Different from the LSD experience, however, are the reported feelings of aggression and stimulation which resemble PCP.

Long-term use. The literature on the consequences of long-term ketamine use is sparse; the following observations are invariably based on single case studies. 'Flashbacks', a short-lived recurrence of the drug experience, have been reported. One clinical report suggests there may be memory, attention and vision impairment from long-term use, which in this case did not return completely to normal once use was reduced.

Physical dependence and withdrawal are not a feature of ketamine use, but there is tolerance although this would appear to take daily injections for a month to fully build up. There is some evidence that a minority of users can become psychologically dependent and that stimulant-like weight loss and loss of appetite can occur during periods of heavy use.

One authority has concluded that frequent and prolonged use of ketamine could cause the same problems as PCP, including psychological dependence, psychosis and gradual loss of contact with the real world.