

New trends of Ketamine consumption in Europe.

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Abstract

The present chapter shows the evolution of ketamine from an anaesthetic to a recreational drug. It presents the different stages which it passed through to reach this point. We present a brief summary of the legal status of ketamine and at the same time its status as an illegal substance. It also outlines the current situation in Europe, with particular emphasis on the countries where consumption is present. Finally we present the lifestyles of consumers' habits as well as future trends in consumption habits.

1. From anaesthetic to party drug

Ketamine (ketamine Chlorhydrate CI-581) was synthesised by Calvin Stevens in 1962 in the Parke-Davis Labs in Michigan. This new drug was related to PCP phencyclidine but its toxicity and effects were lower (Jansen & Theron, 2003). Its key effect was then described as a dissociative anaesthetic creating an effect which is close to a trance experience (Domino et al., 1965). Used in a wide variety of settings by users seeking different experiences, ketamine has been reported to have the advantage of being easy to consume, with the clear dose response effect and relatively short half-life reportedly making the effects easier than LSD (Dillon et al., 2003, Wolff & Winstock, 2006: 205)

Ketamine is used selectively in both European and American hospitals in a variety of procedures in paediatric, obstetric and geriatric patients to provide a range of functions, from analgesia for minor procedures, such as bone marrow, to operative analgesia and use in intensive care units (While, 1982; Green et al., 1998; Bell et al., 2003; Taura et al., 2003) Nowadays, it is also used in developing countries, despite the controversy that sometimes arises because of the fact of administering psychedelic drugs to people (Sobel y col., 1999, Jansen & Theron, 2003:137).

After the discovery of ketamine, it became an affordable drug for the North American subculture of drug users, being named as *rockmesc* during the 60's. In 1970 the FDA (Food and Drug Administration) approved ketamine for use in humans. However, the first warnings appeared on the potential use of ketamine as a drug because it could be obtained without medical prescription (Reier, 1971). In the late 70's, the FDA was concerned about this issue (FDA 1979), and this concern intensified especially after the publication of a set of books that explained personal experiences of ketamine use, for instance *Journeys Into The Bright World* (Moore & Alltounian, 1978) and *The Scientist: A Novel Autobiography* (Lilly, 1978), a report from Siegel (1978), and exchanged ideas in *Psychedelic Drugs Reconsidered* (Grinspoon & Bakalar, 1979).

In the European context, since the end of the 80's and coinciding with the expansion of techno culture, raves and synthetic drugs, ketamine has been introduced as a recreational drug into adolescent parties where it has been consumed in low to medium doses, generally by sniffing, and frequently mixed with other substances such as ecstasy or cocaine (Hidalgo, 2008). In the last 15 years its consumption has risen as a result of its link to the expansion of dance culture (techno clubs, parties and raves; Dotson et al., 1995; Gross et al., 2002; Jansen, 1993; Skovmand, 1996; Moore et., 2001; Riley et al., 2001; Weiner et al., 2000, Jansen & Theron, 2003).

To sum up, the history of the recreational consumption of ketamine could be divided into three phases:

- ❑ **First phase.** During the 60's and 70's it appeared in the US in limited circles of experienced users involved in the psychedelic culture. Its use was intended to create a psychonautic experience of conscience exploration.
- ❑ **Second phase.** From the 80's to the end of the 90's, ketamine embraced the trance culture and its recreational use expanded worldwide through raves. The epicentre could be placed on the Goa beaches (India), but soon it spread throughout the rave and club scene of the US and the UK. However, some authors suggest there is a link between its use and the return of Vietnam veterans who had experienced it on the battlefield (Dillon et al., 2003; Dotson et al. 1995, Wolff & Winstock, 2006: 207).
- ❑ **Third phase.** From the year 2000 until now, ketamine use has spread widely among clubbers and ravers worldwide (Barriuso, 2004).

Nowadays, ketamine constitutes a drug used not only in techno and dance clubs, but also in free parties and tecknival, especially in countries such as Italy, France, Spain and the UK. On the other hand, in other European countries its use is not so widespread and ketamine could be considered as a drug used only by some minorities.

2. Legal situation in Europe

Ketamine is not regulated by any international convention on narcotics. For instance: the United Nations Single Convention on Narcotic Drugs, 1961; the United Nations Convention on Psychotropic Substances 1971, United nations Convention Against Illicit Traffic in Drugs and Psychotropic Substances, 1988.

Even so, the increase in ketamine consumption which has appeared in the last decade triggered some national policies which regulated its traffic and retail as an anaesthetic. Therefore, the legal situation in Europe depends on the national laws of each country.

However, the fact that ketamine is also used as an anaesthetic in its medical and veterinary use, hampered the regulation of this substance (EMCDDA, 2002). Hence, ketamine is regulated by medical acts (i.e. Spain, France, Italy, etc.) although in some countries it has ended up being taken into consideration in national laws on narcotics (Sweden, Greece, UK, etc.) as shown in the EMCDDA list and national reports (available in <http://eldd.emcdda.europa.eu>)

3. Ketamine dealing

Ketamine consumed for recreational use has two supply sources sold on the black market: via hospitals and health centres for its medical use and via developing countries.

Hospitals and health centres have been the easiest way to obtain ketamine, through brand names like Kataral, ketalar Ketamast, Ketavet, etc. (WHO, 2006) depending on the country. These “medicines” were accessible to hospital employees and laboratory distributors, who soon became the suppliers on the black market. The increasing control over these distribution channels made the “medical” presentation of ketamine scarce, but didn’t make it disappear completely. Nevertheless, it is important to highlight that this sort of supply is the most appreciated by consumers, since it is guaranteed by the pharmaceutical industry (Hidalgo, 2003).

Due to this control in hospitals, ketamine users became the suppliers on the black market. A few users related to the Goa trance culture (India) knew of the availability and easy access to this drug in India. As a consequence, smuggling started to arise by sending ketamine as rose perfume in bottles (Jansen & Theron, 2003:137). Nowadays, In the UK, a substantial quantity of ketamine for non-medical use is brought in from countries where it is legally manufactured (e.g. China and India).(Gouhg, 2005 in Wolff and Winstock, 2006)

Wholesale production, diversion distribution and/or dealing of ketamine, has been identified in Belgium, Ireland, the Netherlands and the United Kingdom. In these countries, there appears to be the involvement of organised crime in the production and/or dealing of ketamina, in addition to production and/or dealing by these criminal groups of amphetamine (EMCCDA, 2002: 78)

According to Bellis et al. (2000), access to the substance determines its consumption. Bellis showed that the British consumed lower amounts in the UK than in Ibiza, where availability is much higher. In that sense, Hopkins argued that a less developed market hampers drug consumption. Therefore, it is important to take into account that the ketamine market is quite fragile and so is ketamine consumption.

4. Review of the current European situation based on the National Report from EMCCD.

Estimating the prevalence of ketamine use within a recreational-use population is difficult. Appealing and available to certain populations only and not routinely asked about in household or community surveys, ketamine users are a hidden group. Within the dance scene there are some estimates, which at least suggest that although ketamine is not as popular as cocaine or ecstasy, its increasing availability and use is attractive to some polydrug users. (Wolff& Winstock, 2006:208)

Considering the available information in European National Reports that inform the EMCDDA¹ (28 countries in 2007) The current scope and consumption of ketamine is different depending on the European country under study. Therefore, three categories may be outlined:

¹ <http://www.emcdda.europa.eu/publications>

- ❑ **Category 1.** This is made up of countries in which ketamine has been integrated as another club drug. Due to its widespread use, these countries account for several sources of information to monitor its use.
- ❑ **Category 2.** This category is made up of countries without official epidemiological studies, although some data could be found via surveys on nightlife and interviews with heroin or cocaine users. The Czech Republic, Spain, Ireland, Italy, Greece, Slovakia and Belgium belong to this category.
- ❑ **Category 3.** This is characterised by countries in which ketamine cannot be considered as a widespread drug. National Reports point at the presence of ketamine in nightlife, although this is limited to minority groups. Data has also been collected via the detention and analysis of cocaine or heroin users under treatment who also consumed ketamine. In this category we could find Lithuania, Romania, Germany, Denmark, Latvia, Ireland, Cyprus, Poland, Sweden, Norway, Malta, Bulgaria, Slovenia, Macedonia, Luxemburg, Portugal, and Hungary.

Below we present the situation in countries where epidemiological data is available as well as other relevant data from other countries

France is one of the countries in which ketamine consumption is significant and several studies have been carried out. France has been a country that has made great efforts to monitor ketamine consumption in the last few years. Since the majority of users are travellers in France, it is very difficult to assess the availability of substances such as GHB and ketamine, given the highly restricted nature of the user groups. (France, National Report to EMCDDA, 2007)

In 2002, two contradictory phenomena were observed in relation to ketamine availability: On the one hand, an expansion of use in geographical terms on the dance scene and in urban environments. On the other, a decrease in distribution where it was previously observed. (France, National Report to EMCDDA, 2002:43)

Even though the distribution of ketamine remains highly secretive, there does appear to be a more frequent use of this drug among drug users too. Its consumption seems to take place in large groups, since parallel to its distribution on the dance scene, we can observe use of this substance by a small but not insignificant minority of people attending low threshold institutions. These are young users, mainly male, who start using this substance relatively soon. (France, National Report to EMCDDA, 2002:45)

In 2006, Bordeaux and Marseille report a significant increase of ketamine availability especially in the free party context, although other places in France have declared difficulties in finding it. In Marseille, ketamine consumption also developed in the gay scene, as well as in Paris in the same context.

The following table presents the prevalence of ketamine in 1017 users at free parties

Frequency of consumption on different time scales, N=1017, 2006

	<i>At least once in a lifetime</i>	<i>Previous month</i>	<i>Every day (party)</i>

<i>Ketamine</i>	30%	9 %	0,6 %
<i>Cannabis</i>	95 %	86 %	54 %
<i>Cocaine or crack</i>	79 %	40 %	7 %

Table 1. Sources : Prelud 2006, TREND / OFDT

In **the Netherlands** in 2000 there were signals from Amsterdam that experimental use of ketamine had expanded slightly in different networks (Nabben & Kork, 2000). But in 2007 ketamine was especially used by freaks with cult status, older people, gays (Netherlands, National Report to EMCDDA, 2007: 32).

Use of GHB, amphetamine, LSD, ketamine and hallucinogenic mushrooms was infrequently reported, while heroin, methadone and crack cocaine were hardly or not consumed at all. GHB was clearly less popular than in Amsterdam, although some informants (Nabben et al. 2004) have noted an increase in The Hague as well (see below). (Netherlands, National Report to EMCDDA, 2004)

Since drug use is highly associated with a pleasure-seeking and outgoing lifestyle, visitors of coffee shops, cafés, discotheques and raves have usually more experience than the average population. The table shows prevalence rates of drug use among three different samples studied in the Antenne (Korf et al., 2002) monitor among Amsterdam youth: 1) visitors of coffee shops (2001), 2) pub-goers (2000) and 3) visitors of trendy clubs and (house) parties (1998). Respondents were 25-26 years on average. The response rates were fairly low: about 23- 25% for the pub-goers and clubbers/ ravers and 15% for the coffee shop visitors. (Netherlands, National Report to EMCDDA, 2003:33)

Drug use (%) among visitors of coffee shops, pub-goers and clubbers/ravers in Amsterdam

	Visitors of coffee shops		Pub-goers		Visitors of club and parties	
	2001 N=203		2000 (N=504)		1998 N=456	
	Lifetime	Last month	Lifetime	Last Month	Life time	Last Month
Ketamine	9	2	3	<0.5	21	1
Cannabis	79	88	75	24	85	52
Cocaine	52	19	26	9	48	24

Table 2. Source: Antenne 2003 in Netherlands, National Report to EMCDDA, 2003.

Non-Dutch men were underrepresented and Dutch women were overrepresented in the sample of visitors of coffee shops. The proportion of non-Western respondents in the three samples was 26, 7 and 18, respectively. The proportion of females was 36, 65 and 40 respectively. Source: Antenna monitor Amsterdam (Korf et al., 2002). N.r.=not recorded. Pg 34

In Austria, in 2007 a recent thesis dealt with ketamine as a party drug: for this purpose, people with experience of ketamine use were interviewed (Baumgartner 2007). The thesis does not aim to give representative data but focuses on a better understanding of patterns of use and the motives for and experience with the use of ketamine, primarily with regard to secondary prevention and social work interventions. This survey was carried out on the spot at free techno and goa events and it was shown that 23% of people used ketamine (Austria, National Report to EMCDDA, 2007: 16)

The secondary prevention project ChEck iT! (cf. chapters 5.3 and 9.4) took part in the study Pill Testing - Ecstasy and Prevention co-financed by the European Union (Benschop et al. 2002), for which 225 people attending raves in Vienna were interviewed about their patterns of drug use, among other subjects, in the period from March to July 2002. 61.2% of the respondents were men, their average age was 19.8 years, and 56.8% of the people were students -which confirms the assumption that the relevant target group primarily includes socially integrated young people with high levels of education. More than half of the respondents said they had attended parties at least four times in the previous month. The prevalence rate for ketamine is 12% (Austria, National Report to EMCDDA, 2003:33)

In the United Kingdom. Moore and Measham's (2008:232) further survey evidence attests to the growing use of ketamine in leisure contexts in the UK (see Measham et al. 2001; Copeland & Dillon 2005, Drugscope 2005), particularly amongst "clubbers", that is, elective forms of identity groupings of people committed to "post-rave" electronic dance music cultures (Moore 2004, Hadkinson, 2005)

Drug Misuse Declared: Findings from the 2007/08 British Crime Survey (Hoare & Flatley, 2008) This annual statistical bulletin examines the prevalence and trends of illicit drug use among 16 to 59 year olds (with a particular focus on young people aged 16 to 24) resident in households in England and Wales.

Estimated numbers of 16 to 59 year olds who have taken drugs ever in their lifetime, in the last year and in the last month N= 28.710

	Used ever	Used last year	Used last month
Ketamine	1.5 (423)	0.4 (113)	0.2 (49)
Cannabis	33.4 (9,637)	8.3 (2,382)	4.6 (1,339)
Cocaine powder	8.4 (2,408)	2.6 (734)	1.2 (320)

Table 3. Source: 2007/08 BCS

Findings from the United Kingdom Gay Men's Survey 2005 show widespread ketamine, cannabis and cocaine use (Hickson *et al.* 2007).

In the last year how often (on average) you have used each of the following drugs... (n=16310, missing 116)	% frequency of use (number of men)			
	Once a week or more often	once or twice a month	once or twice in the past year	Not at all in the last year
Ketamine	1.4 (234)	2.2 (365)	5.5 (890)	90.9 (14821)
Cannabis	7.2 (1169)	4.9 (805)	15.6 (2550)	72.3 (11786)
Cocaine / Coke	2.0 (331)	3.6 (588)	11.2 (1819)	83.2 (13572)

Table 4. Source: Hickson et al. (2007)

A survey of 760 club-goers alongside 26 in-depth interviews in the South East of England confirmed that drug prevalence is far higher among this group than among other young people; lifetime prevalence was 79 per cent (as opposed to 50%). They used a wide range of drugs, increasingly synthetic drugs such as ketamine (35% had used) and GHB (13%). Clubbers were aware of health and legal risks; they had adopted strategies to minimise risks such as avoiding unknown dealers (Deehan and Saville 2003 in United Kingdom, National Report to EMCDDA, 2004:31)

In **Spain** In 2001-2003, the initial interview in a study of young heroine user cohorts (*Itinere* Project) carried out in Madrid, Barcelona and Seville (de la Fuente L *et al.* 2005b). This also gives data about ketamine use among heavy users of heroin and cocaine (Spain, National Report to EMCDDA, 2007:111)

Rate of psychoactive drug use among users in Barcelona, Madrid and Seville, 2001.-2003

Ever-in-lifetime				Last 12 Months			
Barcelona	Madrid	Seville	Total	Barcelona	Madrid	Seville	Total
(n=364)	(n=427)	(n=200)	n=991	(n=364)	(n=427)	(n=200)	(n=991)
48.1	10.3	11.0	24.3	34.9	4.2	3.0	15.2
98.9	97.4	95	97.5	93.1	85.7	87.0	88.7
100	100	100	100	94.8	97.7	99.0	97.5

Table 5 Source: Itinere Project in Spain National Report to EMCDDA, 2004

In **Belgium**. Through harm- reduction activities carried out by the non-profit making organisation "Modus Vivendi" and its partners, data was collected in various locations of the French

Community. Since 2000, more than 10 different types of events per year have been targeted. Festivals (rock, techno, hip hop, house music), mega-dancing, city parades, rave parties, traditional events are the main places where questionnaires have been filled in. In 2006, 140 events were covered by 30 associations who made up a total of 2313 people. If possible, questionnaires were filled in and, in 2006, 2313 people met during 76 events covered by 12 partners. The use of GHB, Ketamine and Viagra is limited in the study population. (Belgium, National Report to EMCDDA, 2007:31)

Percentages of “current” drug use in recreational setting, French Community, 2000-2006

	2000 (n=1628)	2001 (n=926)	2002 (n= 1568)	2003 (n=861)	2004 N=11 ²	2005 (N=1510)	2006 N=2313
ketamine	n.a	2	1	3	1	2	2
Cannabis	67	62	47	45	51	45	44
Cocaine	21	10	8	11	12	12	10

Table 6 Source: Belgium National Report to EMCDDA, 2007

In Italy. “National Project for the training of night club personnel to prevent the use of psychotropic drugs among young people”. Characteristics of those interviewed: In all, 2015 subjects were interviewed, with an average age of 25.1 – higher among males (25.5) than females (24.6). (Italy, National Report to EMCDDA, 2007: 112)

In terms of context, comparisons show that those interviewed at concerts prefer coffee shops, pubs, beer halls, discos, wine bars, concerts and gyms; those interviewed at the Street Rave prefer social centres; those interviewed at Arezzo Wave prefer movies, stadiums and private clubs.

Substances used ever/in past year/past month – percentage comparisons by gender

	Males						Females					
	Ever	%	Last Year	%	Last month	%	Ever	%	Last Year	%	Last month	%
Ketamine	150	12.8	88	7.5	51	4.4	73	8.7	42	5.0	23	2.7
Marijuana	915	78.1	737	62.9	624	53.2	558	66.2	436	51.7	351	41.6
Cocaine (powder)	485	41.4	329	28.1	172	14.7	235	27.9	154	18.3	76	9.0

Table 8 Source: Italy National Report to EMCDDA, 2007.

² In the original 2007 National Reitox Report this data appears. However, we can note that it is mistaken because there are 51 cannabis users.

In **Malta** 3.5 % lifetime ketamine among students. 6% male 2% female 18-24 year-old full time students attending post secondary and tertiary education in Malta and Gozo. (Malta, National Report to EMCDDA, 2007:28)

In **Poland** The respondents had had contact with different drugs. They had experimented with substances ranging from cannabis to such exotic drugs in Polish reality as ketamine, GHB or peyote cactus (containing mescaline) brought from Mexico. (Poland, National Report to EMCDDA, 2006: 121)

In **Germany**. With regard to new substances, there are, apart from ketamine and GHB found on the party scene, only sporadic hints of the existence of a highly potent “Thai-ecstasy”, which, however, has not made its appearance on the drug market yet. (Baumgärtner & Gieß 2005). (Germany, National Report to EMCDDA, 2005: 26) at that point.

In **Slovenia** in 2005, on the basis of the data collected in the DUTE questionnaire among the sub population of synthetic drug users³⁴ there were 62.5% of male and 37.5% of female clients. All of them were Slovenian citizens, 79.2% of them were at the time still involved in an education programme, 12.5% of them were unemployed and 8.3% were regular workers. The average age was 15 years old (15.3); the youngest person seeking help was 9 years old and the oldest was 16 years old. (Slovenia, National Report to EMCDDA, 2005:41)

Use of drugs in the sub-population of synthetic drug users in the last thirty days, Slovenia, 2004,

Drugs	Prevalence
Ketamine	5%
Cannabis	100%
Cocaine	62.5 %

Table 9. Source: Institute of Public Health of the RS, 2005

In 2001 and 2005 two research projects using the same methodology were focused on ATS use in a special population of partygoers in Slovenia (Sande, 2002, Sande, 2006). The results are shown in Table ?. The column ATS 2001 represents results from the first research in 2001 while the second column represents the results of research based on the same methodology from 2005 and complementary Internet-based research based on a different sample. (Slovenia, National Report to EMCDDA, 2007: 27)

Lifetime prevalence between 2001 and 2005, Slovenia

	ATS, 2001 M=20.3 year N= 779 %	ATS, 2005 M=21.3 year N= 400 %	ATS, 2004 (www*) M=22.3 year N= 213 %
Ketamine	2.3%	2.5%	1.5%

Marihuana	93.8%	87.5%	95.6%
Cocaine	46.7%	57.9%	66.3%

Table 10. Note: *the last column represents the results of the Internet-based part of the research using a different sample

In **Greece**, substances such as ketamine, GHB, LSD and amphetamines are positioned lower in the list of the most hazardous drugs compared to the more “traditional” drugs. Interestingly, even the regular use of these drugs poses – in the perceptions of the students – comparatively less risks than the experimentation of cannabis, ecstasy, inhalants and other drugs. (Greece, National Report to EMCDDA, 2005:73)

Perception of accessibility (Fairly easy / very easy) of various drugs per geographical stratum (nationwide school population survey 2003)

	Athens	Thessaloniki	Other Urban Areas	Semiurban/rural areas
	%	%	%	%
Ketamine	8.8	8.0	7	6
Cannabis	36.6	36.0	27.6	25.1
Cocaine	18.2	16.2	14.7	11.6

Table 11. Source. UMHRI/EKTEPN, 2003 in National Report, Greece, 2005)

GHB as well as ketamine are still just consumed in individual cases within party scenes. Key Findings from the 2005 Local Drug Trend Monitoring System in Frankfurt MosyD (**M**onitoring **S**ystem **D**rug **T**rends)

In **Portugal**, Carvalho (2007) carried out ethnographic research on the psychedelic trance youth subculture. Although in Portuguese recreational contexts MDMA is the main substance associated with electronic dance music, the author found out that the studied population (*trancers*) also use LSD and other hallucinogenic substances and new synthetic drugs, such as GHB, 2CB and Ketamine. (Portugal, National Report to EMCDDA, 2005:81)

In the **Czech Republic**, the prevalence of the use of several substances from the group of new synthetic drugs and other less common types of drugs was also investigated within the framework of the Dance and Drugs survey. The so-called synthetic drugs can be used intentionally but they can also appear in tablets sold as ecstasy instead of the active substance MDMA. As far as these substances are concerned, only the use of PMA and 4-MTA was detected among those attending dance parties; prevalence values are relatively low. The prevalence of use of commonly available poppers (usually amyl nitrate) is higher. Other synthetic drugs used in the dance setting involve GHB (gama-hydroxybutyrate) and ketamine.

Monitoring of drug use among those attending dance parties (Mravčík and Valnoha . 2005) who have used preventive and harm reduction services provided by NGOs also inquires about lifetime prevalence and repeated use of selected drugs within the last month. Table 13-2 shows

the values of lifetime prevalence and the prevalence of having used these drugs three times or more within the last month. With the exception of a significantly higher value lifetime prevalence of ecstasy (exceeding 90%), it found a similar lifetime prevalence of the use of basic types of drugs to the Dance and Drugs survey. This is probably caused by the fact that the services provided by NGOs in the dance setting usually involve illustrative tests of ecstasy, a service which is the most attractive for the target population. In this respect, the sample is biased by a sampling error. (Czech Republic, National Report to EMCDDA, 2005: 93)

Prevalence of drug use among those attending dance parties who used preventive and harm reduction services provided by NGOs in 2003 and 2004 (Mravčík and Valnoha, 2005)

Drug	Lifetime		Used 3 times or more within the last month	
	2003	2004	2003	2004
Ketamine	-	3.3	-	1.1
Cannabis	91.2	96.7	55.1	55.4
Cocaine	17.5	22.8	2.1	3.3

Table 12. Source: NGOs in 2003 and 2004 (Mravčík and Valnoha, 2005)

In **Luxembourg**, the use of most 'new synthetic substances' (Substances such as MBDB, 4-MTA, Ketamine, PMMA 2C-I, 2C-T-2, 2C-T-7, 2C-D, 2C-E, TMA-2, BZP, TFMPP, 5-MeODIPT,5-MeO-DMT, AMT, ALEPH 7, DXM, DPT, mCPP) recently detected in other EU Member States has not been reported thus far. (Luxembourg National Report to EMCDDA, 2007: 42)

In **Hungary**, the most well-known drugs are followed by ketamine regarding frequency, which is also known as "I-dust" on the Hungarian black market. It is characteristically seized in small amounts, since 2003-2004 consistently 30-50 times every year. The spread of and demand for ketamine is, however, not considerable. Ketamine (Hungary National Report to EMCDDA, 2007: 81). Moreover, the use of magic mushroom and herbal drugs seem to be more and more prevalent today, and there are unambiguous data indicating the presence of ketamine, GHB and 2-CT as well (Nadas et al.2006)

In **Finland** The use of new synthetic drugs, such as 4-MTA, or other synthetic drugs producing stimulating or hallucinogenic effects, such as "poppers" (nitrites), "crystal meth" (methamphetamine), ketamine and GHB seem to be limited. This information is based exclusively on the views of the users approaching therapeutic programmes and it is not confirmed by data from other sources, such as raids or research. On the other hand, the increase in ketamine use is verified by various sources (General Chemical laboratory, qualitative research data). (Finland National Report to EMCDDA, 2006: 70)

As we have seen, the diffusion of ketamine is rising in each of the European countries. Available data from surveys show a gradual spread of ketamine. This spread has been in a few countries, such as the United Kingdom, France, Spain and Holland, countries which also have a high consumption of cocaine and cannabis. In this respect, I consider that in these countries the

use of drugs is more widespread among young people. Although ketamine is still not very widespread in other European countries, consumption of this substance is likely to increase in future years.

The qualitative studies also show a progressive increase in cocaine consumption in different parts of Europe. However, the qualitative data shows how the use of ketamine is usually framed within certain contexts, especially rave party. The consumer profile of ketamine is uneven, but several studies agree that many young people are travellers, that is without work and without a fixed residence and their lifestyle is focused on drug consumption and organization of rave events. However, ketamine is increasingly in discos and clubs, and the profile of a young consumer is socially normalized. But we must point out that some of the factors of the spread of ketamine in contexts beyond raves, is due in part to the increased presence of youth clubs which have been in contact with the rave culture, where they discovered ketamine and now the clubs are spreading.

5. Lifestyle of ketamine consumers

Before the first use of ketamine, the people encountered had generally already experimented with several psychoactive substances. They all had in common significant polydrug use practices, as a minimum in a party scene, or more rarely as part of a daily use activity. Generally, the first use of ketamine was in a group in a party scene.

En Reynaud-Maurupt et al., (2007) present that the four “affinity groups” present on the techno scene and identified during the ethnographic phase, are distinguished by distinct socio demographic profiles, but also by differing levels of consumption (Table). Consequently, we find a sort of gradual progression when we consider the social situation and the practices of the users according to the group with which they associate by preference:

- ❑ The “Alternative” group (rave and free parties). Part of this group comprises counterculture enthusiasts.
- ❑ These are distinguished first and foremost by their fondness for music. Better integrated at a social level, this group includes a higher percentage of students.
- ❑ The “Clubbing” group (i.e. clubs playing electronic music). This group is chiefly comprised of hedonists, who devote a substantial budget to going out and to buying clothes. The “gay friendly” establishments investigated during the survey belong to this particular affinity group;
- ❑ The “Select” group (invitation-only/sponsored entry clubs or bars requiring “smart dress”)44. This is a sector of society with a living standard which is higher than found among the other groups, whose members cultivate an atmosphere of selectivity (Reynaud-Maurupt et al., (2007).

Consumption on at least one occasion during the last 30 days of the main illegal psychoactive substances or those used other for their normal purpose, in the affinity.

	Alternative	Urban	Clubbing	Select
	N=476	N= 398	N=430	N=192

	%	%	%	%
Ketamine	6.5	0.8	0.2	0.0
Cannabis	88.2	73.6	50.2	50.0
Cocaine (non base)	50.0	27.1	27.9	27.1

Table 13. Source: The « Quanti-festif » survey, OFDT/ GVRIS, 2004-2005 (Reynaud-Maurupt et al. 2007)

As shown in table num. 12 , it is in the *alternative-people* sphere where ketamine consumption is spread the most. As a result of the increasing spread of ketamine, many youngsters have performed an experimental or sustained consumption. Nevertheless, we could find that certain profiles valued ketamine as a drug in a recreational context.

Reynaud-Maurupt, C. & Akoka, S. (2004) provided information on diverted use of ketamine and the sociological profiles of users. Two standard social profiles emerged, both frequenting the techno party scene to different degrees:

- ❑ Man, young, not highly-educated, living in insecure conditions or at least with low resources. He most often used psychoactive substances (without even counting alcohol and cannabis) several times a week or daily.
- ❑ Man or woman, whose drug use was regular but "controlled" (maximum every weekend), or several times a week. This person perceived himself or herself to be in better health than the people in the first profile.

But these changes are also due to changes in the population attending low threshold facilities (notably more people coming from the party scene) France, National Report to EMCDDA, 2007: 70)

As a result of examining different ketamine research we have come up with four essential profiles of ketamine consumption based on lifestyle, music, context and consumption of other drugs. We distinguish here between ravers and travellers, the so-called alternative people, since relevant differences between these two groups are to be observed. However, they might be confused when examining their party culture since both attend raves and are keen on the trance culture.

- ❑ **Ravers:** Users coming from the rave and tecknival culture. They consume ketamine by sniffing it as well as other drugs, for fun too. They remain standardised people of their society without relevant issues derived from drug consumption.
- ❑ **Travellers:** The majority are related to rave culture although they differ from the previous ones in their lifestyle focused on drug consumption and parties. They live in unstable conditions and/or problems derived from drug consumption. Ketamine is often administrated through syringes.
- ❑ **Clubbers:** Users of clubs and electronic music parties. They consume ketamine by sniffing it together with other drugs such as ecstasy and cocaine. They show no social

problems derived from drug consumption. (Moore & Measham: 2006) (Demetrovics, 2009)

- ❑ **Psychonautics:** Although this was the first aim in ketamine consumption, nowadays it is only a minority that use this drug for this purpose. They consume ketamine in quiet places without any links to parties. The aim of consumption is introspection. They normally administer it through syringes. (Netherlands, National Report to EMCDDA, 2007: 32) Newcombe, 2008).
- ❑ **Problematic cocaine and heroin users:** Problematic users of heroin and cocaine that sporadically consume ketamine.

6. Key factors determining the spread of ketamine .

Different factors could be mentioned in order to explain the recent spread of ketamine in European clubs and raves. However, we could identify key factors that are deemed to be the most relevant ones:

Curiosity : Youngsters, due to psychosocial factors feel attracted to the world of drugs. Therefore, when access to ketamine is presented, they are likely to tend to consume it since it is something new.

Effects: *Anaesthetic and dissociative effects are highly appreciated among consumers, since they appear to be compatible with party and music.*

Context: Linked to the previous factor (effects), electronic music framework with its clubs, raves and tecknivals are suitable places/contexts to experience the effects of ketamine since they feel united with the music.

Lifestyle : For some travellers, drug consumption in general and particularly ketamine for some of them, represents a sign of identity. As a result, ketamine effects match their traveller lifestyle, which includes few social responsibilities.

Wider supply: One of the most important factors is supply. Even though we have observed that the market context is different for each European country, it is essential to highlight that greater access to ketamine implies more consumption.

This set of factors determines the geography of ketamine in Europe and explains whether ketamine is widespread in certain countries, in certain contexts and among certain lifestyles. It is shown through research that legislation does not determine ketamine diffusion, as highlighted by Moore and Measham (2006)

7. Future trends of Ketamine

Hidalgo (2003) pointed out that ketamine is still a minority drug, although it is clearly an emerging substance with a high potential for spreading. There are even some authors who state that it could easily replace LSD as one of the most controversial drugs in history, as a result of its influence in music and the arts (Kelly, 1999)

Six years later, we can see that ketamine has not had the influence foreseen or any mass media impact as other drugs did, like LSD or MDMA. However, ketamine has been spreading gradually throughout Europe, becoming in some countries (the UK, France and Spain) another established drug for recreational use. On the other hand, consumption in other countries (Finland, Germany, Estonia, etc.) is reduced to minority groups and its spread is still in a stationary phase.

Concerning public health problems posed by ketamine, it has been observed that the majority of consumers remain normal consumers (Moore and Meashman, 2006 2008), although a few, especially travellers, perform compulsive consumption that leads them to have social problems. Therefore, risk reduction strategies and information about ketamine is a key factor to avoid such issues. Moreover, Griffin (2008:207) explains that *“the political response in terms of the criminalisation of Ketamine from east to west –despite an absence of widespread health or social problems –reflects the persistence of prohibition as an ideological force”*, although laws are found not to be a solution to risk reduction.

Finally, it is important to state that even though the number of ketamine consumers is lower than those consuming other drugs, like MDMA or cocaine, it is appropriate to continue monitoring this substance through surveys on a national scale, besides continuing with specific research projects.

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