Recent Trends Relating to Psychoactive Substances Use and Synthetic Substances Components

The trends presented here are stemming from the TREND (Tendances Récentes et Nouvelles Drogues, Recent Trend and New Drugs) system, whose first results have just been published in a report we are referring to. In order to complete the sources in existence, this system attempts to set up an approach enabling to detect the emerging phenomena, to understand the contexts, the modes of use and the various consequences of using these substances, and to follow up their evolution.

Although still carried out on an experimental basis, this system is intend to bring out tendencies observed in two consumption environments: with 10 urbanized areas accounted for observation, the urban environment covers the populations who use corresponding psychoactive substances, rather characterized by “problematic” modes of uses, in touch with treatment and accommodation facilities, notably those said to be “with a low threshold”; whereas the party environment mainly concerns the festive use of populations moving around in venues broadcasting a certain kind of music called techno, as well as in night-clubs.

Psychoactive substances use tendencies

To follow up the consumption evolution of the most widely used psychoactive substances, such as alcohol, cannabis, or tobacco, the most appropriate method is the general population survey. These surveys are limited when the use of substances affects a little percentage of the population, or socially marginalized individuals. The TREND system tries to cast some light on that point, starting from a precise observation of particular populations. The substances surveyed do not include alcohol, cannabis, or tobacco (considered elsewhere, see: Indicators and Trends, ’99 edition) massively used by these populations, to which other substances uses are added.

Circulation of psychoactive substances

In order to follow up the consumption evolutions of psychoactive substances, a circulation scale has been based on twelve explanatory elements (availability, accessibility, price, quality, users profile, perception, modes of administration, functioning of substances, structuring degree of small trafficking, range of selling places, visibility degree of small trafficking, small traffickers profile) built up with field observations. That scale includes four steps:

- **“Circle of initiated” phase**: during this one, a substance is appealing to some close circles curiosity, who are able to get and experiment it for themselves.
- **Circulation phase**: during this one, experimentation and use are circulated differently; it can affect various age brackets (generation mode), individuals belonging to different social backgrounds (socio-cultural mode), or different geographical areas (geographical mode). Such a phase can be called “restricted” when operating according to one mode only, or “widespread” when following various modes.
- **Plateau phase**: a somewhat balance is reached, where neither enlarging nor restricting distribution can be clearly observed. Being listed under such a phase do not inevitably mean that general population use has levelled off, for the scale is built up from observations made on particular populations;
- **Decreasing phase**: circulation is decreasing according to a geographical, generation, or socio-cultural mode, or even the three modes at the same time.
A method for analyzing the circulation process has been applied to 23 substances surveyed, locating each of them upon the circulation scale (diagrams 1 and 2). The method carried out can be illustrated with the following remarks, which refers to 6 substances out of 23.

**GHB** (an anaesthetic substance) has been essentially listed under the restricted circulation phase (party environment), because if it is still experimented, it has come out of one “circle of initiated”, and its used is signalled for its relaxing effects highly-rated for regulating those of uppers.

**Ketamine** (an anaesthetic substance) ranks under the circulation phase (party environment) mainly because of the following elements: a distinct improvement of its image associated with the increasing interest it is generating; its use covering many areas; and lastly its limited circulation outside unauthorized techno gatherings.

**Crack** (cocaine in smokable form) ranks under the circulation phase (urban environment), as signalled as available in many sites, and it is beginning to affect users in various socio-cultural environments.

**Cocaine** is located in the widespread circulation phase (urban environment) because its availability has significantly increased in all the sites, and it affects various age brackets and socio-cultural backgrounds.

The meaning of **ecstasy** (party environment) is so confused that determining its circulation degree proves tricky. Social use has lead to a situation where such a term is henceforth referring to two different realities: a *galenical form*, every tablet or capsule sold under that label, regardless of its reel contents; a *sought-for effect*, the effect causing empathy. Ecstasy has been located in the “plateau” phase, because even if some lack of interest for a substance considered too “soft” can be observed, it does not mean a disinterest for a substance that remains essential among those used in the party environment.

In spite of its availability, heroin is listed under the decreasing phase on the circulation scale (urban environment): on one hand, because of its restricted accessibility mainly due to a disorganization of small trafficking local networks; and on the other hand, because the widespread circulation of cocaine and substitute treatments have made it less attractive. From one environment to the other, the comparative analysis of connections among substances and circulation phases brings out dissimilarities, analogies, and junctions simultaneously facing with each other.

Although the urban environment is still dominated by opiates in the first place, then uppers (cocaine and crack) in the second place, uppers (ecstasy, cocaine, and speed) and hallucinants are prevailing in the party environment. The latter seems to be more exposed to whatever substance circulation. As far as the circulation mode is concerned, there are substances whose circulation dwindles in one environment yet widens in another one. That the case of heroine, which stands on the decreasing phase in the urban environment yet on the restricted circulation phase in the party environment. Conversely, ecstasy ranks under the “plateau” phase in the first environment but under the restricted circulation phase in the second one.

In both environments the rise of uppers can be noticed, notably that of cocaine, which substance remains the only one to ranks under the widespread circulation phase in both environments; the same can be said to a lesser extent of crack in the urban environment, and of speed in the party environment. This is a new phenomenon as far as France is concerned, when comparing with the prevailing situation some years ago, when opiates would have an almost undivided domination over other substances.

The borderlines between both environments seem to mingle more and more. Thus, substances which previously appeared in one environment only are now emerging in the other one. This intermingle process is partly due to cannabis, cocaine, and ecstasy pushers operating in both environments, or to heroin users or ex-users. Furthermore, the substances commonly used in one environment (opiates and benzodiazepines, in the urban environment) can be introduced in another one as a regulation factor for the uses in existence (uppers and hallucinants, in the party environment).
Diagrams 1 and 2: Distribution of the substances surveyed according to their circulation phase

* All medicines mentioned in those diagrams are listed upon the circulation scale according to criteria referring to the indirect use and their availability on the alternative market, and not according to their medical prescription circulation degrees.

Sources: OFDT – TREND
Multiple use and use regulation

The multiple use of psychoactive substances is a mass phenomenon that can be observed in both surveyed environments. The rationality of behaviours must be taken into account for confirming such a widely admitted phenomenon. When interpreting that way, the notion of “use regulation” is preferred to the notion of multiple use; use regulation is then defined as: a combined use of substances, whose purpose is to alter the effects of other substances already in use, the latter being concomitant or postponed.

Around forty various combinations of psychoactive substances within the scope of a use regulation have been listed. They can be graded according to their respective purposes and grouped together into four functions:

- The function of maximizing the effects: in order to get a maximum of “positive” effects in combining many substances. It has then nothing to do with a simple accumulation of quantities but with a qualitative alteration of the effects.

- The function of balancing the effects: when the effects are adjusting one another in order to help the user to fit whatever he/she may feel at anytime to the changes of contexts, or to his/her need to experiment various states.

- The function of controlling the “negative effects” of one or many psychoactive substances, whose purpose is to keep their “positive” effects only. Such a function notably refers to the phase known as way down during which the substance “positive” effects fades into becoming to “negative” ones (feeling uneasy, withdrawal symptoms).

- The function of “replacement” due to the need to switch substances, without losing the sought-for effect. The initial substance is replaced when less available or perceived differently by the user.

Understood as a use regulation, the multiple use stands within the scope of an expansion mode already operating and, in that respect, covers a reality that cannot be denied. Taking into account the always changing range of substances being circulated, the fact that regulation practices have become commonplace, and also the risky if not highly dangerous nature of some combinations mentioned above, it seems presently of the utmost importance to set up prevention strategies that fit such practices.

Morbidity

There are not many French perennial indicators for morbidity and mortality relating to the use of illicit psychoactive substances (see: Indicators and Trends, ’99 edition). The current survey system do not precisely cover all the professionals involved in the French drug users’ health treatment. In order to bridge such a gap, two quantitative pilot surveys have been carried out within the scope of TREND: one among general practitioners, the other among the employees of an emergency ward in a Parisian hospital. Both surveys are completed with field observations provided by the TREND network. Despite the exploratory aspect of the data collection, some remarks can be made as follows.

Some characteristics of the users treated by that emergency ward and these GP’s are similar to those observed in specialized centres and hospitals (survey know as “November survey”, DREES). Individuals resorting to treatment are a majority of heroin substitute ex-users or non-substituted heroin users, around 30 years-old, of which almost one-third are females. Rohypnol® is the benzodiazepine mostly used by far. Collecting the data among the general practitioners included a qualitative aspect that made Subutex®-related local problems emerge (among which abscesses, skin necrosis and lymphangitis can be mentioned), observed by more than half of the doctors interviewed, psychic troubles (reported by one-third of the doctors), troubles relating to alcohol addiction, dental problems generally connected with heroin use, and repeated pulmonary infections.

Today, whatever the mode of treatment involved, drug users taking substitutes stand for the majority of patients in treatment centres. If substitutes undoubtedly improve those patients’ treatments and the downfall of deadly overdoses is connected with the outbreak of
such treatments, the side effects of Subutex® injection are nonetheless visible and problematic.

**Cocaine use** seems about to become not insignificantly responsible for health troubles. In 1997, more than 10% of treatments in specialized centres and hospitals, and in the pilot survey about emergencies are connected with the use of that substance. Low threshold facilities seem already acquainted with problems relating to it.

Nowadays, the uses of ecstasy, LSD, and amphetamines do not seem to be much obvious in terms of health troubles. The supplementary system tested here and set up on a larger scale could help confirming or contradicting that observation. The possible motives for treatment relating to those substances could also be better known.

Lastly, **multiple use** is widespread among users resorting to various modes of treatment. It then makes those patients’ diagnosis and treatments more difficult.

**Analyzing synthetic substances**

The data presented here are stemming from the SINTES (Système d’Identification National des Toxiques Et Substances, National Identification System for Drugs and Toxic Substances) database, which includes a large part of the information systematically and nationally collected by field structures, whether they belong to the law-enforcement or to the social and health systems. They mirror but partly the reality of synthetic substances used in France.

As far as the year 1999 is concerned, the SINTES database covers the results of 433 analyzed samples, of which 261 (60%) come from police seizures; 90 (21%) from customs seizures; and 82 (19%) have been collected by social and health contributors. As the system is being set up, those partners’ contribution should amount to 70 per month, that is 840 per year.

**Chart 1: Substances revealed by analysis in 1999**

<table>
<thead>
<tr>
<th>Substances analyzed*</th>
<th>Number of samples</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uppers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDMA</td>
<td>207</td>
<td>48</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>62</td>
<td>14</td>
</tr>
<tr>
<td>Ephedrine</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Caffeine</td>
<td>68</td>
<td>16</td>
</tr>
<tr>
<td>Other uppers</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td><strong>Medicinal substances</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anaesthetics</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Other substances found in medicines</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Hallucinants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(LSD, psilocine or psilocybine)</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Lack of active substance**</td>
<td>60</td>
<td>14</td>
</tr>
<tr>
<td>Others***</td>
<td>19</td>
<td>4</td>
</tr>
</tbody>
</table>

*Substances listed under that entry may be found in the same sample
**Also covers fatty acids and sugar
***That entry notably includes anabolic steroids and synthetic intermediate substances

**Source: OFDT – SINTES**

Analyzing the SINTES database information show that MDMA and amphetamines are the synthetic substances most often revealed among those being circulated in 1999. Other psychoactive substances analyzed are varying much and their occurrences were often very limited. However, there is no evidence that those substances are not much used, and their mere presence in the database must lead to a quick assessment of their possible toxicity. A
significant share of the circulating substances immediate toxicity refers to medicines in presence without the user's knowing it; and the latter, when disappointed by the effects, may be apt to increase his/her takes. The mixed samples also frequently appear (24% of the samples different from medicinal drugs contain two or three active substances), yet some substances appearing in combinations are not used deliberately, although they involve potentially harmful pharmacological interactions.

The SINTES database is also helpful for a particular analysis of the issue relating to substances being sold as ecstasy and not always containing MDMA. Such analysis is made possible thanks to background elements collected by social and health contributors, especially the labels, the supposed contents, and the sought-for effects. Fifty-five samples of the database are considered by users as being ecstasy or MDMA. To a wide extent, those are tablets (87%). Once the toxicological analysis made, it revealed MDMA in 39 samples (71%), medicines in 9 samples (16%), amphetamines in 4 samples, and MDA in 3 samples.

Conclusion

The TREND system is still being experimented. As it is the fruit of a number of observers' labours, who are located on distinct sites and reporting information on particular populations, it does not claim mirroring the entire situation that prevails in France, as far as the circulation and use of psychoactive substances are concerned. Furthermore, splitting off the observational field into urban and party environments is far from covering the whole reality of drug use. In the future, more environments and cultural backgrounds will be explored, in order to reach a wider covering of the scope of uses and the circulation of substances.

Jean-Michel COSTES

• For more information
  OFDT, Tendances récentes: Rapport TREND, March 2000
  OFDT, Drugs and Drug Addiction: Indicators and Trends, '99 edition

• Methodological references
  The TREND (Tendances Récentes Et Nouvelles Drogues, New Trends and New Drugs) system
  It is a "sentinel" monitoring network system focusing first (for the urban environment) on 10 observational sites (Rennes, Lille, Paris, Parisian suburbs, Metz, Dijon, Lyons, Marseilles, Toulouse, and Bordeaux), then, for the party (techno) environment, on the observation of some events. As a rule, it favours qualitative methods of sampling and organizes a concomitant collection of data by many observers on the same site, in order to validate information, understand the phenomenon, and reproduce it within its context.

  The system relies upon two kinds of sources: a network of sentinel observers and institutional sources.

  The sentinel observers network: in each site of the urban environment, observing essentially refers to an ethnographer investigator belonging to the IREP network, low threshold facilities employees, and on some sites, to ASUD groups. In the party environment, these observers only include members belonging to the Techno-plus association, notably in the Parisian area, and ethnologists of the LIRESS association, specialized in techno culture and covering many regions. That part of the system collects qualitative information (observations, interviews, and synthetic reports).
Two quantitative pilot surveys are completing these observations:

- One survey among the employees of a Parisian emergency ward (during 2 months, 115 patients admitted);
- Another survey among 24 GP’s belonging to the drug users treatment networks, distributed around ten TREND sites (284 patients admitted).

The system also uses the information provided by institutional contributors to the monitoring centre. The partnership being set up includes: the Office central de Répression du Traffic Illicite de Stupéfiants (the Central Office for Suppressing Narcotics Illicit Trafficking), which allows some judicial procedures relating to the drug use and/or trafficking to be examined; the Caisse Nationale d’Assurance Maladie (National Health Insurance Fund), which provides a follow-up of prescriptions as regards substances directly or indirectly connected with drug uses; the Centres d’Évaluation et d’Information sur la Pharmacodépendance (Centres for Valuating and Informing about Addiction to Medicinal Substances), which transfer data about illicit psychotropic substances or those being diverted from their medicinal uses (OPPIDUM and OSIAP systems); deaths observed or published in relation with medicines and illicit substances overdoses (DRAMES system); and, lastly, the Institut de Veille Sanitaire (Institute for Sanitary Watch), which compiles data concerning the sales of syringes and substitute treatments (SIAMOIS system);

Made previously by the OFDT team, the data analysis is then debated by an expert committee, including members of the appropriate commission from the OFDT scientific committee assembly and external specialists.

The SINTES project (Système d’Identification National des Toxiques Et Substances, National Identification System for Drugs and Toxic Substances)

It is a database including the physical and chemical description of the samples of synthetic substances seized by the law-enforcement systems, then analyzed by the laboratories belonging to the police, the customs, and the IRCGN (National Gendarmerie); or collected in various environments (festival sites, private parties, night-clubs) by prevention or treatment contributors, or researchers, then analyzed by two toxicological hospital laboratories (Fernand-Widal in Paris and Salvator in Marseilles). Partners close to users for treatment or prevention also collect epidemiological data relating to the consumption backgrounds and to the profiles of individuals using the collected samples.

Limits of the data issued

Besides the limits due to the qualitative methodological methods, the information provided by TREND must be interpreted considering its investigation scope: the ten observational sites and both consumption environments previously described. The aspects upon which the system does not bring any information must then be emphasized. Thus, the modes of use concerning the share of the users population, who do not attend any social or health facilities, or who are not picked out by the law-enforcement system, as well as the populations living in the country, are not covered by the observational scope of the project so far. Party environments associated with musical styles (rock, rap) different from techno have not yet been investigated too. As far as the geographical covering is concerned, DOM-TOM’s (Overseas départements and territories) in particular do not yet take part in the observational sites. Lastly, the uses of the most common psychoactive substances (alcohol, tobacco, cannabis), documented elsewhere, are not accounted for.