

An exploratory research on benzodiazepines' drug users

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In France, opiates misuse in drug users (DU) has been monitored for many years. Monitoring benzodiazepines (BZD) misuse is more difficult, since their consumption is perceived as a minor issue by both users and prescribers. As part of a general project to better differentiate use and misuse of these substances by DU, analysis were conducted among DU in low threshold and harm reduction facilities (HRF) participating in the 2012 ENA-CAARUD survey [1]. This communication focuses on a research identifying, among different profiles of recent BZD users, those more likely to divert BZD from their prescription frame.

METHOD

Data collection took place in 142 (out of the 153 French) HRF in 2012. 2,905 users answered the questionnaire and 879 were recent BZD users. Classification used a K-means clustering method breaking up BZD users according to patterns of use and socio-economic integration. Variable selection was based on their contribution to the model (F), qualitative knowledge on DU profiles [2], previous research carried out in this population [1-3] and bibliographical data [4]. Number of clusters has been decided using a hierarchical clustering method. Variables finally entered in the model were, in the last 30 days: number of consumed substances; injection; use of heroin; use of methadone; use of morphine sulphate, use of base cocaine, use of at least one hallucinogen, and a socioeconomic precariousness score (see box).

The socioeconomic precariousness score includes 3 variables: Health coverage; Housing; Origin of income (details in [1]).

The prevalence of users who misused a psychoactive medicine in the last 30 days was considered an indicator of BZD misuse probability. It includes: use of methadone or buprenorphine without medical monitoring; use of these substances on a non-daily basis; injecting methadone or methylphenidate (Ritaline®) or BZD; snorting BZD. Injecting or snorting buprenorphine and injecting morphine sulphates are not included because too common to be discriminant among users of these substances who attend low threshold facilities.



BZD misuse = use out of the strict therapeutic scheme: purchase and resale on the street market, self-medication, use to get high often in combination with other substances, for their disinhibiting effect, as a modulator for other products, with other route of administration than oral.

RESULTS

BZD users differed from non-users in that they were more **polydrug users**, they had been more **frequently hospitalised for psychiatric-related problems** in the year prior to the survey and were **slightly older**. The 6 obtained profiles have all in common opiate use and more or less intense cocaine use. They differ from each other by:

- The number of substances consumed during the last 30 days, usually related to very problematic uses.
- The degree of socioeconomic precariousness, the youngest being generally the most vulnerable, due to a poor access to social benefits.
- The "use pattern", mainly defined by the range of used substances.

"Alternative festive" pattern (groups 1, 2): marked by a heavy consumption of hallucinogens, amphetaminic stimulants and heroin as the most used opiate.

"Conventional festive" pattern (part of group 3): encompassing users of opiates (mainly heroin) and cocaine associated with amphetaminic stimulants but few hallucinogens.

"Traditional" pattern: including users much more focused on opiates, either because they are following an opioid substitution treatment (OST), even if they occasionally use other substances or inject buprenorphine (groups 5, 6 and part of group 3), or because they are very precarious urban users using substances they can easily have access to (group 4).

The 6 profiles of BZD users

- Extreme polydrug users with "alternative" way of life:** younger than in other groups, they are followers of the techno alternative culture and, for some, have an alternative way of life (living in community, in trucks ...). They are characterised by an extremely intense polydrug use and take major risks (Figure 2). All are injectors, 37% shared their injecting equipment in the previous month and 74% injected cocaine. At least 6 out of 10 are psychoactive medicines misusers (ie. one third took methadone outside any medical frame).
- Wandering users with "alternative profile":** they differ from group 1 by their lower prevalence of use, less risks taken and consecutively by a lower frequency of psychoactive medicines misuse. Above all, their living conditions are significantly unstable (ie. 9 out of 10 have no permanent housing). Other elements attest to their strong social disintegration, ie. frequent loss of identity documents or enlistment in Social Security schemes.
- Socially integrated polydrug users** have greater social integration due to job incomes for 1 out of 6 users and enjoy social benefits for the majority of others. Their use pattern is mainly based on the "opiates-cocaine" duo, half of them consuming drugs typical of festive events.
- Polydrug precarious users** embody the archetypal figure of urban dissocialized user (nearly 7 out of 10 live in squats or are homeless) except that almost 4 out of 10 do not inject, especially some "crackers".
- Socially-integrated "ex-users":** this group includes both the oldest and the most socially integrated (19% live from job incomes and 78% have independent housing). They essentially consume substitution opiates and a large majority use them within the strict framework of a treatment (with the exception of the injected buprenorphine), even if they keep taking other products occasionally. Although half of them still use injection, they take little risks.
- Precarious "ex-users"** are mainly long-term opiate users failing to escape from precariousness. They differ from group 4 by an exclusive therapeutic use of opioid medical drugs, other uses remain restricted to alcohol and to a lesser extent to cannabis. If one third of them has never injected, another third has stopped injecting. They benefit more frequently of social temporary accommodation than those of group 4.

Figure 1: Mapping of various drug user profiles according to polydrug use level (vertical axis) and socioeconomic precariousness level (horizontal axis)

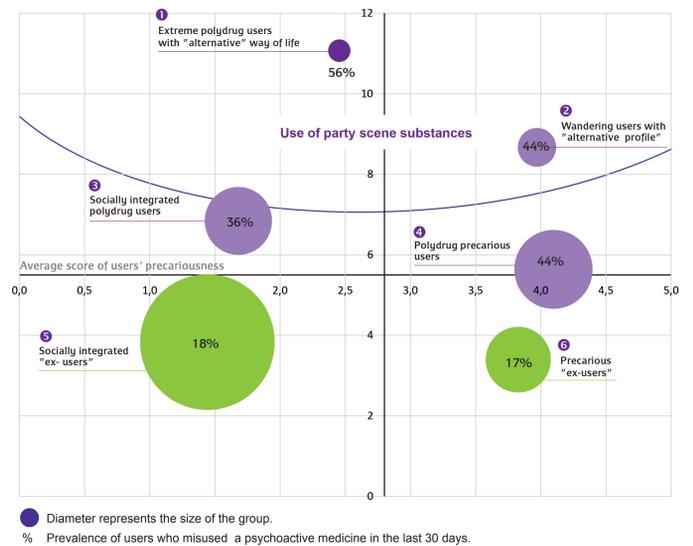


Figure 2: Prevalence of psychoactive medicines misuse among BZD users and non-users

	Prevalence of psychoactive medicine misuse	Groups	Last 30 days consumption									
			> 34 y	Precariousness score	OST	Average number of used substances	Opiates	Base cocaine	Amphetaminic stimulant	Hallucinogens	Injection	Injection material sharing
	18%	BZD non-users	53%	2.8	52%	3.2	66%	24%	16%	12%	41%	19%
1	56%	Ext. polydrug users "alternative" way of life	33%	2.5	73%	11.0	100% Heroin n°1	71%	96%	92%	94%	37%
2	44%	Wandering users "alternative" profile	39%	4.0	80%	8.7	98% Heroin n°1	40%	71%	80%	77%	24%
3	36%	Socially integrated polydrug users	51%	1.7	83%	6.8	98% Heroin n°1	35%	41%	38%	77%	27%
4	44%	Polydrug precarious users	48%	4.1	77%	5.6	96% Buprenorphine n°1	33%	16%	15%	64%	18%
5	18%	Socially integrated "ex-users"	71%	1.4	75%	3.8	83% OST	9%	4%	4%	51%	7%
6	17%	Precarious "ex-users"	64%	3.8	70%	3.4	76% OST	8%	4%	1%	32%	7%

CONCLUSION

The break-up of BZD users among HRF client in different use profiles, cross-checked with prevalence of psychoactive medicine misuse confirms that the latter is primarily related to the intensity of addictive practices and risk taken. Misuse is more frequent among users with high consumption of both opiates and substances circulating in techno festive events.

References

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