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LICIT AND ILLICIT DRUG USE IN AMSTERDAM II

Report of a household survey in 1994 on the prevalence of drug use among the population of 12 years and over

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Summary and conclusions

13.1 Introduction

In 1987, the first Amsterdam household survey on drug use was conducted. Three years later, in 1990, a second survey was carried out and in 1994, we repeated the survey a third time. Although some questions were added, we developed a consistent instrument to study drug use in Amsterdam. The three surveys not only enabled us to study drug use at a certain point in time, but also to look at dynamics in drug use.

In the months of April to July 1994, almost 10,000 inhabitants of Amsterdam of twelve years and over were approached with a request to participate in a household-survey on drug use and lifestyle. A total of 4,364 respondents were interviewed. The questionnaire was almost identical to the earlier ones, except for some items regarding health and well-being (the so-called SF-36) which were new in 1994. These items were added to the end of the list.

The major goal of the 1994 research project was threefold:

- to accumulate up-to-date knowledge of drug use in the population as a whole and in subpopulations (summarized in Section 13.2 (prevalence) and 13.3 (patterns of use));
- to gain insight into the dynamics of drug use in the population by comparing current figures with those of 1987 and 1990 (summarized in Section 13.4).;
- to explore the question of utility and comparability of different methods of data collection, focusing on drug use (summarized in 13.5).

In addition, we also investigated the relationship between the use of drugs and the health of the respondents. The results of that investigation are summarized in Section 13.6.

13.2 The prevalence of drug use

Prevalence of drug use is described in different ways in the second chapter of this report. Looking at prevalence figures (lifetime, last year and last month; see Table 13.1), it is obvious that only alcohol, and, to a lesser extent, tobacco are used by large parts of the population. Cannabis, ranked in at third, having been used at least once by 29 percent of the population. Use, especially regular use, of hypnotics, sedatives and difficult drugs (an aggregate of cocaine, amphetamines, ecstasy, hallucinogens and heroin; see below) was relatively rare.

Table 13.1 Prevalence of drug use in 1994

drug	lifetime abs.	lifetime %	last year abs.	last year %	last month abs.	last month %	N
tobacco	2 898	66.6	1 966	45.2	1 778	40.8	4 353
alcohol	3 746	86.1	3 358	77.1	3 015	69.3	4 353
hypnotics	844	19.4	435	10.0	292	6.7	4 350
sedatives	876	20.2	399	9.2	240	5.5	4 333
cannabis	1 272	29.2	459	10.6	297	6.8	4 350
cocaine	297	6.9	76	1.8	32	0.7	4 324
amphetamines	203	4.7	22	0.5	12	0.3	4 350
ecstasy	137	3.2	63	1.5	28	0.6	4 309
hallucinogens	192	4.4	22	0.5	5	0.1	4 326
inhalants	47	1.1	10	0.2	5	0.1	4 344
opiates (all)	337	7.7	93	2.1	29	0.7	4 364
heroin only	57	1.3	12	0.3	3	0.1	4 364
no drug at all	362	8.3	623	14.3	870	19.9	4 364
pharmaceutical drug	1 454	33.3	738	16.9	467	10.7	4 364
illicit drug (incl. cannabis)	1 309	30.0	494	11.3	307	7.0	4 364
difficult drug (excl. cannabis)	463	10.6	126	2.9	54	1.2	4 364

Our findings o the prevalences of drug use were reflected in the continuation rates, which can be calculated on the basis of the prevalence figures. Where difficult drugs were involved, the continuation rate was low: for instance only six percent of all people that ever used amphetamines, did so in the month prior to the interview. In other words: the majority of respondents that started using at some point in time, did not continue that behaviour. The only difficult drug for which we found a relatively high continuation rate was ecstasy: 20 percent. However, this is still a low figure as compared to, for instance, alcohol: here 81 percent of those who had ever had a drink, had at least one drink in the month prior to the interview. Tobacco too, scored fairly high with a percentage of 61. The remaining drugs, hypnotics, sedatives and cannabis, came in somewhere in between: the continuation rate was around 30 percent.

Lifetime frequency also confirmed the pattern: by far, most of the users of difficult drugs and the majority of the users of hypnotics, sedatives and cannabis did not engage in use on more than 25 occasions. Our findings on smoking and drinking contrast sharply: in 11 and 14 percent respectively, use was limited to less than 25 occasions.

Not surprisingly, 'drug careers' were longest for alcohol and tobacco. The average age of initial use was around 18, younger than was the case with all other drugs. The average age of cessation (if at all) was 39 and 35 respectively. Initial and last use of most other drugs generally occurred between 20 and 30 years of age. Exceptions were sedatives and hypnotics, which had many of relatively old users. (For exact figures concerning onset and cessation ages, see Chapter 2, Section 2.5, Figures 2.1 and 2.2.)

Total lifetime abstinence was rare: only eight percent in our sample never touched a single drug. A somewhat larger group, however, had been abstinent for

quite some time: 14 percent did not use any drug in the year prior to the interview and 20 percent was abstinent in the preceding month.
The other extreme, multiple use of difficult drugs, was also quite exceptional. A percentage of 5.5 had used more than one difficult drug at some time, though not necessarily at the same point in time.

13.3 Patterns of drug use

tobacco

Although the majority of the population had smoked at one point in time (67%), present prevalence was 40 percent. This was higher than the average for the whole country (36%). More smoking men than women were found, but differences were concentrated in the older part of the population and in ethnic minority groups. In these specific groups, disapproval of tobacco use by women was probably the cause of lower prevalence. Age, gender and ethnicity are the most important variables in explaining tobacco use. Other variables have little influence (for instance income level), or are strongly related to age structure, which can make a false impression of a causal correlation (for instance, with regard to the position on the labour market).

alcohol

Drinking alcohol is clearly an established habit in Amsterdam. Lifetime prevalence was 85 percent; last month prevalence was still high at 69 percent. Nevertheless, consumption was usually rather moderate. Most drinkers (78%) consumed fewer than three glasses a day. On the whole, drinking started moderately in the teenage years. Until the age of 20, the frequency use hardly ever exceeded eight days a month. At the same time, the number of glasses was only rarely higher than six at one occasion. Starting from roughly the age of 20, both frequency and volume expand. From around the age of 50 the number of drinkers started to decrease somewhat. The people that continued drinking, changed their pattern to a more moderate one (fewer days a month, fewer glasses on one occasion).
Differences between men and women resemble those between the age groups: there were fewer women who drank, and those who did, drank less in terms of volume and frequency.
Drinking was rare among members of ethnic groups, especially from Morocco and Turkey. Within this subgroup, the women stand out for very low prevalence figures.

cannabis

In the Netherlands, cannabis has a somewhat strange position of a drug that is neither licit nor illicit. This is a result of a distinction in the opium law between drugs with ‘acceptable risks’ and drugs with ‘unacceptable risks’. As a conse-

quence, prosecution of cannabis misdemeanors are low priority cases as long as small quantities are involved. The special position of cannabis is reflected by wide availability and low prices in relation to the other illicit drugs.
This wide availability was not reflected in an enormous percentage of (former) cannabis users. Lifetime prevalence of cannabis was 29 percent. Last year, 11 percent of our population had used a cannabis product; last month 7 percent. Almost half of the group that had ever used cannabis (43%), had done so less than 25 times.
Men and women have more or less the same lifetime prevalence, but last month users are more likely to be male. Both an age-effect and a generation effect were visible in cannabis use. Most of the users were young. The generation effect indicates that use is penetrating into higher age groups, as the generation that first started using in the sixties, grows older.
There seemed to be a possible relation between use by relatives and use by the respondent him/herself. Use by the respondent often coincides with (knowledge of) use by a relative. The exact nature of the causal connection of such use behaviour is not clear yet.
The socio-economic status provided some very interesting facts in relation to cannabis use. The conclusion is that people with a higher status have higher prevalence figures, but do not differ from other groups on more recent prevalence figures. In lower status groups, fewer people use, but a greater proportion continues using once use has been established.

difficult drugs

The concept of difficult drugs was introduced in this study to avoid definition problems. A simple division into licit and illicit drugs is not sufficient, due to the specific formulation of the Dutch opium law, which distinguishes between cannabis and other illicit drugs. Both categories are illicit, but priority for criminal investigation and prosecution is given to the latter. So, while still illegal, the possession of cannabis is not prosecuted as long as small amounts are involved. In common language, difficult drugs may be referred to as hard drugs. We have decided not to use this term because it gives the erroneous impression that we are dealing with a particular hazardous category of drugs and that ‘soft’ drugs, on the contrary, pose no health hazard at all. However, in both cases, it is mainly the way in which the drugs are used that determines whether a drug, ‘soft’ or ‘hard’, is dangerous or not. In other words, ten glasses of beer daily can be considered more harmful than a single sniff of cocaine.
The difficult drugs included in this study consist of the following substances: cocaine, amphetamines, ecstasy, hallucinogenes and heroin.
The prevalence of difficult drugs was relatively low. The lifetime prevalence (of any difficult drug) was 10.6 percent, last year prevalence 2.9 percent and last month prevalence 1.2 percent. Use of cocaine is most widespread but ecstasy is catching up on last year and last month prevalence.
Difficult drug use is more prevalent among men. The age group 40-59 scored highest on lifetime prevalence, but many had apparently given up the use of

drugs, as indicated by the fairly low last year and last month prevalence.
On socio-economic aspects, position on the labour market and educational level proved to be important, but income showed no significant relation with difficult drug use.

pharmaceutical drugs

Characteristics of users of pharmaceutical drugs differed very much from the familiar picture of the drug user as drawn in earlier chapters. The users of pharmaceutical drugs were older, less well educated, absent from the labour force and very often, female. Together, those variables indicated a certain, low, position on the socio-economic ladder, which seemed to determine the higher level of prevalence. Although not studied explicitly here, it is important to note that health is an important additional factor here. In Section 13.6, some interesting findings of that relationship with health will be summarized. Most pharmaceutical drugs were taken on prescription, which means that, at one point in time, a doctor found medical cause to prescribe the drug. Of course, medical condition is strongly related to age, and to a lesser extent, to socio-economic status and gender.

13.4 Developments in drug use

As can be seen in Table 13.2, levels of drug use have generally remained rather stable in Amsterdam over the years investigated. Levels of use of the most widespread drugs, tobacco and alcohol, remained the same after 1990. The prevalence of pharmaceutical drugs also remained on the same level.

Table 13.2 Developments in drug use 1987, 1990 & 1994

	Lifetime prevalence			Last year prev.			Last month prev.			N		
drug	1987	1990	1994	1987	1990	1994	1987	1990	1994	1987	1990	1994
tobacco	71.6	67.4	65.3 º	49.6	46.3	44.9 º	45.9	42.5	40.0 º	4376	4443	2170
alcohol	87.6	85.7	84.5 º	78.8	77.4	76.0 º	71.1	68.4	68.3 º	4370	4443	2168
hypnotics	20.0	18.7	19.0	11.2	9.4	9.8	8.2	6.5	6.4 º	4372	4440	2169
sedatives	22.2	20.2	20.8	10.7	9.2	9.7	7.3	5.9	6.0	4374	4438	2152
cannabis	22.8	24.0	28.5 º	9.3	9.8	10.5	5.5	6.0	6.4	4370	4440	2166
cocaine	5.6	5.3	6.0	1.6	1.2	1.6	0.6	0.3	0.8	4371	4438	2136
amphetamines	4.4	4.0	4.3	0.6	0.5	0.4	0.3	0.2	0.3	4366	4438	2164
ecstasy	-	1.2	3.4	-	0.7	1.7	-	0.1	0.9	-	4440	2126
hallucinogens	3.8	3.9	4.3	0.4	0.3	0.4	0.1	0.1	0.0	4370	4428	2140
inhalants	1.1	0.9	1.3	0.3	0.1	0.1	0.2	0.0	0.1	4366	4428	2156
opiates (all)	9.2	7.2	8.5	2.4	1.9	2.3	1.1	0.6	0.7	4360	4422	2179
heroin	-	1.1	1.2	0.3	0.1	0.2	0.2	0.0	0.0	4360	4422	2179
no drug at all	6.3	8.1	9.3 º	12.0	14.2	14.9 º	17.4	20.4	20.1 º	4378	4443	2179
pharmac. drug	36.6	32.9	33.5 º	19.1	16.7	17.1	13.2	10.9	10.7 º	4378	4443	2179
illicit drug †	23.6	24.7	29.1 º	9.8	10.3	11.2	6.0	6.3	6.7	4378	4443	2179
difficult drug †	8.2	8.1	10.0 º	2.2	2.0	3.0	1.1	0.8	1.5	4378	4443	2179

† In 1987, heroin and xtc are not included. Sign. test Chi sq. • p <.05 (1987-1990, 1990-1994) º p <0.5 (1987-1994)

An overall look at illicit drugs would show rising levels of lifetime prevalence, mainly due to more widespread use of cannabis and ecstacy. Figures went up by 4.5 percent points to 29 percent of the population (figures for illicit drugs went up by 2 percent points to reach a level of 10%, if cannabis is excluded).
However, this increase was caused primarily by the so-called 'generation effect'. This is reflected by stable levels of prevalence for most age groups except the oldest ones. For ecstasy, prevalence rates rose in all age groups where use was present, but this drug has not (yet) been introduced in the youngest and in the highest age groups. The increase in the other age groups is due to the large-scale introduction of this drug on the market. Prevalence rates rise fastest among the 20-34 year old.
Cannabis use has also increased among the 20-24 year old, from 36 percent in 1990 to fifty percent in 1994. In the same age group last month cocaine use has become significantly more popular (now 2%).

13.5 Data quality

In Chapters 10, 11 and 12 we investigated three different methodological aspects that are of major importance with regard to the quality of the data. We discussed the representativity, the effects of different approach strategies, and we analyzed the non response in some detail and calculated its effects on the response.
Again, our primary objective was to apply a consistent instrument, with which we could measure real changes in the use of drugs. Changes should only be ascribed to changing population compositions (for which effects we also would be able to standardise the scores), or to real increases or declines in the use of drugs.
To attain that goal, we tried, as in former years (1987, 1990) to use the same instrument. The experiments with other approaches were left out of the comparisons with former measurements. We had only included them to learn from them and to help us to improve comparisons with other research done elsewhere, or to change the approach in the future.
Despite the application of the same instrument, the response proved out to be significantly (approximately 5 per cent) lower than in 1990. Only half of the number of people approached, decided to participate. We tend to explain this different response rate by the fact we made use of a different bureau that managed the survey as far as the fieldwork was concerned, compared to the bureau we hired in 1987 and 1990.
However, the lower response rate did not result in other differences between the respons and non-respons group in 1994, compared to the differences in 1990. The bias appeared to be much the same compared to four years previously. Our first important conclusion is that the representativeness of the 1994 data was comparable to the representativeness of the 1990 data set.
However, due to the high non-response rate, it was even more important to investigate the characteristics of the non-response. We were able to reach a substantial number of former refusals (43% response in the second run) and of those who were not at home in the main survey (46% response in the second run).

The somewhat surprising conclusion of the non-response analysis was that there were only very few people who fundamentally refused to cooperate. Various simple and 'innocent' reasons were mentioned for not participating in the main survey. The outgoing lifestyle of those not at home in the main survey explained this type of non-response in the main survey. However, that outdoor behaviour was not specifically linked to consumptive behaviour.
Recalculation of the response weighted on the basis of the knowledge of the non-response group until the level of the respons of 1990, did not, therefore, result in significantly different drug prevalence scores. Our second important conclusion was that the differences between the respons and the non-respons category did not affect the prevalence figures significantly.
The response in the 'not-at-home' category, which we were able to reach in the second run, appeared to have lower drug prevalence scores, compared to the former not-at-home category we succeeded to reach in the 1990 non-response investigations. We attribute the difference to the higher intensity of the 1994 re-approach strategy. And although the response - non-response differences did not result in significant changes in drug prevalence figures after weighting, our third important conclusion was that a higher response figure and an intensified approach strategy will, at least in the Amsterdam context, result in lower drug prevalence scores, than those obtained from the low response datasets acquired.

13.6 Drug use and health

In our 1994 household survey, we introduced a new instrument, the SF 36 Health Status Survey. This instrument enabled us to obtain self-reported health scores for each of our respondents. We compared health scores of drug users to health scores of non users, while controlling for relevant variables such as age and lifestyle.
Conspicuous negative associations were found between health scores and pharmaceutical drug use, irrespective of lifestyle. To a lesser degree, we also observed negative associations for 'out of home' oriented cannabis users, and home-oriented difficult drug users. However, highly outgoing users of difficult drugs (heroin, cocaine, amphetamine, ecstasy, hallucinogens) show no difference compared with highly outgoing non-users. Alcohol users scored, on average, higher than non-users of alcohol on all health dimensions, irrespective of lifestyle.
The differences in health scores between drug users, and more so when we split these drug users into different lifestyle categories, did not show any evidence for the existence of linear causal relations between drug use and higher or lower health scores. Most probably, this is due to the large and contradictory variety of functions drug use can have. An overall view does not allow for any hypothetical conclusions other than that drug use can support different lifestyles in which either depressing or stimulating functions are dominant. In other words, some drugs may be used as reactions to health impairing conditions by one group of users, but for pleasure amplification purposes by another group of users (cf. difficult drugs). A further-reaching hypothesis suggested by our data was that drugs (it is not really important which ones) may be taken for pleasure, for (self)

medication, or alternatively for both functions. As suggested by our cannabis use data, a drug might even be chosen for both functions at the same time. The particular function chosen depends on many underlying variables that were not discussed in this chapter.
However, pharmaceutical drugs seem to be chosen mainly in functions relating to impaired health.
In our view, drug use does not *cause* the lower or higher health scores that we were able to measure, but is an expression, or rather, an adaptation to general conditions in an individuals's life. In this sense, the use of drugs is active behaviour, intentional in relation to the functions it is intended to serve.

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