



**PACIFIC
INFORMAT-
ION
SERVICE
ON
STREET-
DRUGS**

**j.k. brown
m.h. malone**

: editors

VOL. TWO

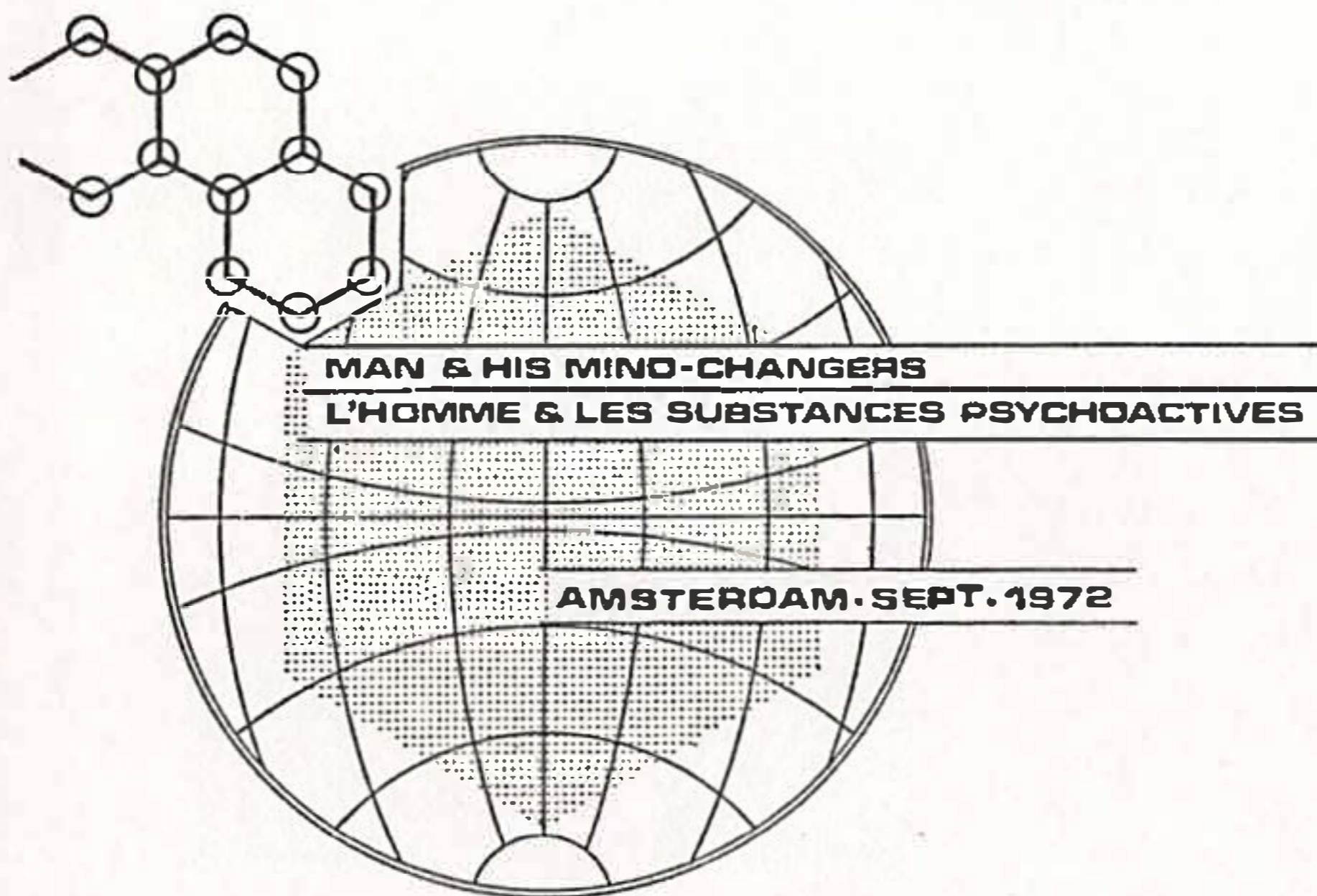
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"ANALYSIS OF CONTROLLED SUBSTANCES"

selected from the
Proceedings of Section B-3

Wednesday - September 6, 1972

**30. INTERNATIONAL CONGRESS
ON ALCOHOLISM & DRUG DEPENDENCE
4th-9th SEPTEMBER, 1972**



**30° CONGRÈS INTERNATIONAL SUR
L'ALCOOLISME & LES TOXICOMANIES
4 - 9 SEPTEMBRE 1972**

Pacific Information Service on Street-Drugs

Volume 2 No. 5 & 6
June, 1973

INTRODUCTION

The editors of the Pacific Information Service on Street-Drugs have departed from their normal publishing format to bring to their readers an important sequence of relevant papers. These papers were presented on the afternoon of Wednesday, September 6, 1972 at the 30th International Congress on Alcoholism and Drug Dependence meeting in Amsterdam, The Netherlands. There was no provision made by the sponsoring organization (International Council on Alcoholism and Addictions) to publish the papers in Section B-3 (Analysis of Controlled Substances) so that they could receive a wider audience. This was unfortunate since these papers represented the first international reports of several non-governmental street-drug analysis programs. The analytical results reported were surprisingly uniform whether from laboratories in The Netherlands, Germany or the United States. The conclusions presented are important historically and have significant sociologic, toxicologic, and economic aspects.

The initial paper of the afternoon by Brown and Malone will not be included here since it will appear shortly in the Journal of the American Pharmaceutical Association, and because readers of the Pacific Information Service on Street-Drugs are generally familiar with the results. The papers presented by the Amsterdam investigators should be especially interesting since their method of collecting samples gives a more accurate picture of the illicit drug market than does a program relying on voluntary submissions of samples for analysis. A similar non-governmental procedure could be used with great effectiveness in the United States.

The editors have also included a bibliography for readers desiring comprehensive information in regard to the current quality of street-drugs.

June 14, 1973

STREET-DRUG IDENTIFICATION PROGRAM IN AMSTERDAM

Koos Zwart, Stichting Drugs Informatie, P. O. Box 5322,
Amsterdam, The Netherlands

The first thoughts about a facility for street-drug analysis came up during the biggest "Pop-Festival" ever organized in the Netherlands, The Kralingse bos Pop-Festival in Rotterdam in 1970.

This festival took place with the full co-operation of the local authorities and one part of this co-operation consisted of the absence of police officers -- only 8 plainclothesmen were present to collect information for a report -- we had a perfect situation for observation of all patterns of drug use.

It was reported that drug use was observed in 80 to 90 percent of the population of 68,000 visitors. Cannabis was used the most and LSD (lysergic acid diethylamide) was also taken by thousands of visitors.

A team of 85 volunteers, the so called "drugteam" was formed to give aid and information.

The team handed out 12,000 information bulletins in 7 languages, gave aid to 1,200 people with drug caused troubles, 7 of which had to be treated with minor tranquilizers such as chlordiazepoxide (Librium). We brought one of these 7 to a hospital, not because of his drug use, but because of severe malnutrition. One of the problems we encountered was the impossibility of checking the drugs that were used, as to their real composition. Many users told us they had used mescaline, psilocybin or other exotic drugs whose supposed differential effects overwhelmed us.

To obtain information about the composition of all those pills and powders, we ordered a Valltox Identification Kit that was said to be used in the U. S. A. by narcotic officers. Within days after arrival of the drug testing kit, we recognized that this kit was of little value for our goals. Our next step was to seek contact with an institution that had facilities for professional analyses of street-drugs. We soon found it in the Wilhemina Gasthuis, the hospital of the University of Amsterdam, where the pharmacy department did analyses for the psychiatric clinic of the Wilhemina Gasthuis. The reason that they would perform this service for us was that they felt it necessary to gather concrete facts about the composition of illicit drugs. For us, the aim was systematic research of the street-drug market of the Netherlands in order to prevent the use of dangerous substances.

We did an extensive search of the "black-market" and collected 1,500 illicit drug samples for analysis. We contacted 96 correspondents over the whole country, with a concentration in Amsterdam which is the country's main drug scene. The others were located at random over the country. In this way we hoped to collect a representative sample of the drugs available in the Netherlands. In addition, twenty institutions that deal with drug users and their drugs, sent us samples that have been offered by their clients for analysis. These samples were usually sent in because of their ill-effects after use and they are not considered representative samples and they are not included in our statistics. (See Kamp, et al.)

Because certain drugs are illegal in our country, as in most other countries, we had to devise a system by which the anonymity of our correspondents was guaranteed and by which all data submitted by our correspondents could be recorded. To achieve this goal we designed sampling sets. For obvious reasons we cannot inform you about this system.

Beginning in the summer of 1970 occasional analyses were done and then in January, 1971, the program became fully operative.

During the first few months we operated in complete silence. But, as our goal was dissemination of the information obtained, we published in October, 1971, an article in the underground paper Aloha which gave the results of analysis of 500 samples. Also we started to talk about analysis results in the "Beursberichten" ("Straight Dope"), a weekly radio program, every Saturday at 2 PM, broadcast by VARA, the socialist broadcasting company.

We have a post box where individuals may send samples of drugs for analysis. The samples are sent to us and anonymity is assured by the use of a pseudonym by the sender. If the results indicate a potentially dangerous sample, the results are broadcast on the radio program, "Beursberichten". About one million people are regular listeners of this program.

We think, of course, that the most important people to be informed of the analytical results are the users.

Amsterdam, Netherlands

September, 1972.

THE RESULTS OF THE STREET-DRUG IDENTIFICATION PROGRAM IN
AMSTERDAM

J. C. Filedt Kok, P. E. Kamp and R. A. van Welsum

Department of Pharmacy, University Hospital, Wilhemina Gasthuis,
Amsterdam, The Netherlands

After Prof. Brown's excellent lecture about the programs in the U. S. A. (J. Amer. Pharm. Assoc., NS13: In press), I should like to give you the results of our street-drug identification program in Amsterdam.

This project is the result of the silent but excellent co-operation of our laboratory with the Drug Information Foundation (Stichting Drugs Informatie) and in particular with Mr. K. Zwart and Dr. E. Fromberg. Mr. Zwart has already given the details and goals of our project.

We started the analysis of illicit drugs in November, 1970. After a slow beginning there is now a regular stream of samples of these drugs. Up to now, we have analysed more than 1500 samples. The results are summarized in the table. These results are for 1971 and up to August 1972. All samples were screened by thin-layer chromatography.

Sixty-three percent of the samples were in agreement with the chemical compound as it was offered on the street-market. For LSD (162 samples) this was true in 72 percent of the samples. About half of the LSD samples contained other substances, that also reacted with p-dimethylaminobenzaldehyde reagent, probably resulting from a not completely successful synthesis of LSD, or perhaps by deterioration of the LSD.

Contamination of LSD samples with arsenic or strychnine was never found. One sample of LSD was contaminated with Preludin (phenmetrazine hydrochloride). A great variability in the LSD content was found. We found concentrations ranging from 3 to 490 μ g of LSD per sample. In our samples the "Gelatin Trips" were most potent followed by the "Sunny Explo's". There was, also a great variability in the appearance of the LSD samples.

Actual Chemistry

Alleged	LSD	Mesc.	Psil.	DMT	STP	THC	AMP.	Methyl-amph.	Methyl-phen.	Preludin	Cocaine	Procaine	Morphine	Codeine	Heroin	Noscapine	Opium	Other	Number of Samples
LSD	162						7			1								61	231
Mescaline	24	-			3													15	42
Psilocybin	12		-															6	18
DMT				1															1
STP	1				-														1
THC						-										1		2	3
Amphetamine	3						63	79	1	4						1		51	202
Methyl-phenidate									-									1	1
Cocaine											7	1				3		4	15
Morphine													3					4	7
Codeine														5					5
Heroin							1	1							6			5	13
Opium																	24	1	25
Unknown							3	5	1						1		1	61	72
Totals	202			1	3		74	85	2	5	7	1	3	5	7	5	25	211	636

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Mescaline (41 samples) or psilocybin (18 samples) have not been detected in samples from the illicit market. Most samples, offered as mescaline or psilocybin, contained LSD. One alleged mescaline sample contained chocolate powder with morphine. Three samples actually contained STP (4-methyl-2,5-dimethoxyamphetamine). Only once was mescaline found, not surprisingly in a specimen of Peyote cactus, which is not included in the table.

We found DMT (N,N-dimethyltryptamine) and STP only at the beginning of the project. Three samples were alleged to be THC (tetrahydrocannabinol) but no THC was detected.

Samples of alleged amphetamines contained an amphetamine in 74 percent of samples screened. Methylamphetamine was detected in 53.5 percent and amphetamine in 46.5 percent of the samples analyzed. Amphetamine was found most frequently as a tablet and methylamphetamine usually a crystalline powder. One sample of methylamphetamine was contaminated with cocaine. Other compounds that were detected in alleged amphetamine samples were: Preludin (4), LSD (3), methylphenidate (1), ephedrine (1), noscapine (1), codeine (1), and cocaine (1). Sodium glutamate was found six times in the first three months of 1971. In June and July of this year (1972) five samples of alleged amphetamine were actually diphenhydramine (an antihistamine).

Cocaine was not found frequently on the illicit market. We received 15 samples. Seven samples actually contained cocaine, three were noscapine and one procaine.

The opiates seemed not to be widespread on the illicit market. Seven alleged morphine samples were received. Three of these samples actually contained morphine. One was a mixture of morphine and codeine. The five samples offered as codeine actually contained this compound but one sample was contaminated with amphetamine.

Heroin was offered thirteen times. Six samples actually contained heroin. One sample was contaminated with STRYCHNINE. Other alleged heroin samples were Palfium [dextromoramide] (2), amphetamine (2), and caffeine (1).

Opium was actually opium in 24 cases out of 25 alleged opium samples submitted for analysis.

Within the category offered as unknown, one finds a great diversity of compounds such as; amphetamines (8), opiates (4), barbiturates (6), tranquilizers (14), and analgesics (4). One sample, directly from Japan, contained ergotoxine. Another sample was found to be ergotamine.

Supposed hallucinogenic seeds were found to be the very toxic castor beans (Ricinus communis) and Abrus precatorius. In another case they were Morning Glory seeds (Rivea corymbosa).

In summary one might say that compounds frequently offered as LSD and the amphetamines contained these drugs in 70 percent of the samples analyzed. This figure was about 50 percent for the compounds less frequently offered such as the opiates and cocaine. Mescaline, psilocybin and THC were never found on the illicit market in Amsterdam. Hallucinogens such as DMT and STP were very rare.

In addition to the above mentioned drugs we analyzed 680 samples of hashish and 124 samples of marihuana. Because no pure THC was available at that time we arbitrarily fixed the THC content of a specimen of Red Lebanon hashish at 100 units. The intensity of the coloured THC spot of the unknown on the chromatogram was compared with the intensity of the Red Lebanon THC spot. This comparison allowed us to estimate the relative THC content of each hashish sample. Arbitrarily we called the quality good to excellent if the relative THC content was 200 units or higher. If less than 200 units the quality of the hashish was considered moderate to poor. In addition to the estimation of the THC content each hashish sample was checked for contamination with other compounds.

Opium, morphine and caffeine were detected in 84 samples (12.4 percent) of all of the hashish samples analyzed. Opium was found 53 times, morphine 12 times, and caffeine 19 times. Seventy percent of the hashish samples contaminated with opium were from the Far East, especially Pakistan but also from Nepal, Kashmir, India, and Afghanistan. In one case we were assured a particular hashish sample came from Pakistan, this sample was contaminated with opium. These facts suggest that mixing the hashish with opium occurs in the country of origin (see following paper, D. Eskes). On the other hand there seems to be some correlation between the supply of hashish of moderate to poor quality and the frequency with which contamination was found. When the supply of hashish samples of moderate to poor quality increased, there seemed to be a tendency to find more samples contaminated with opium. This suggested the mixing of opium with hashish was a local product. These contradictory findings need more investigation before any conclusion can be drawn.

Finally, we are finding a decrease in the number of samples of moderate to poor hashish and also a decrease in the number of samples contaminated with opium or morphine.

We started in May 1971 to measure the relative THC content. The following comparisons are for the months of May, June and July of 1971 and 1972.

Last year (1971) 73 percent of the hashish samples analysed during these months had a relative THC content of 200 units or less. In the same months of 1972, 29 percent of the hashish samples contained 200 units or less of THC. In this period in 1971, 9.5 percent of the hashish samples were contaminated with opium or morphine; in 1972 this figure was 1.5 percent.

Finally, I will give some information about the opium content of the contaminated hashish samples. We established a morphine concentration of approximately 0.15 to 0.25 percent. We assumed that opium usually has a morphine content of 10 percent. This would indicate that the hashish samples, contaminated with opium, contained approximately 1.5 to 2.5 percent opium.

Amsterdam, Netherlands

September, 1972.

The Amsterdam group have published some articles on the results of their program and maybe found in the following references.

Filedt Kok, J. C., E. Fromberg, P. J. Geerlings, H. J. van der Helm, P. E. Kamp, E. P. J. van der Slooten, and M. A. M. Willems. 1971. Analysis of Illicit Drugs. Lancet, 1: 1065.

van der Helm, H. J. 1972. Analysis of Illicit Drugs. In, Biochemical and Pharmacological Aspects of Dependence and Reports on Marihuana Research. De Erven Bohn N. V., Haarlem, The Netherlands. pp. 119-122.

The authors

P. E. KAMP - born in Rotterdam; studied pharmacy at the University of Leiden. His first position, after completion of his studies, was in industry; then to retail pharmacy for a number of years. Next was hospital pharmacy, first at the Bergwegziekenhuis in Rotterdam. In 1963 he moved to Amsterdam to become chief pharmacist at the University Hospital, Wilhemina Gasthuis. Mr Kamp has been interested in toxicology and has published a number of papers in this area. So, it was only natural that he became interested in the analysis of illicit drugs and currently is a very active member of the Amsterdam group.

J. C. FILEDT KOK - born in Nieuwer Amstel in 1939. He studied pharmacy at the University of Amsterdam and became a pharmacist in 1968. First he was in military service with RNO-TNO (scientific office of the army) section of Toxicology. Then he became a member of the Documentation Commission on Toxicology of the Royal Dutch Pharmaceutical Society (K. N. M. P.). In 1970 he joined the Department of Pharmacy, University Hospital, The Wilhemina Gasthuis in Amsterdam.

R. A. VAN WELSUM - born in Amsterdam. He received his medical education at the University of Amsterdam. During his studies he did research on lipoprotein-lipase at the Laboratory for Medical Enzymology. Later he did an investigation of the proteins of cerebrospinal fluid at the Neurochemical and Clinical Laboratory of the Neurological and Psychiatric Departments of the University of Amsterdam. He received his M. D. degree in 1970 on the thesis, "Agar Gel Electrophoresis of Cerebrospinal Fluid in Neurology". During the preparation of his thesis he spent a year at the Laboratory for Experimental Neurology, working on the "pink spot" in urine of psychiatric and parkinsonian patients. Currently Dr. van Welsum is a member of the group analysing illicit drugs in Amsterdam.

THE RESULTS OF THE ANALYSIS OF STREET DRUGS GATHERED BY THE
AMSTERDAM (NETHERLANDS) POLICE

Dr. Derek Eskes, Forensic Science Laboratory, Municipal Police,
Amsterdam, Netherlands

In one respect it is impossible to compare the results of the analysis of street drugs by Mr. Kamp (see previous paper) and his co-workers with our results. We cannot calculate the percentage of samples which is in agreement with the chemical compound as it was offered, because in many cases we do not know under which name the drug was offered to the consumer. But, in many other respects there is a striking resemblance between our results. For example; we have never found in our samples pure THC (tetrahydrocannabinol), mescaline or psilocybin. Cocaine is seldom found. We find the same "curiosities" such as noscapine, DMT (dimethyltryptamine) and morphine mixed with codeine. Clearly Mr. Kamp and his co-workers are examining samples originating from the same market as do the police samples.

In the Netherlands, examinations of seized illicit drugs are performed in the Forensic Science Laboratory of the Ministry of Justice at the Hague and only the drugs seized in Amsterdam are analysed in the laboratory of the Municipal Police at Amsterdam. There is close co-operation between these two laboratories and the described investigation about opium containing hashish samples was done together.

Though we are often asked whether strong and strange effects, experienced by hashish consumers may have been caused by mixing the hashish with other more dangerous drugs such as STP (4-methyl-2,5-dimethoxyamphetamine), mescaline or opium, we could never prove the presence of the above mentioned drugs in these cases. It was found invariably that these hashish samples did contain a high amount of THC (tetrahydrocannabinol).

In recent years there have been many reports in the Netherlands, but little in the literature (1,2), about opium containing hashish samples. In March 1971, after a year of searching, we received both in Amsterdam and the Hague our first samples of hashish containing opium. Since that time we have received them regularly but in low numbers. In the months of August and September of 1971, we received in Amsterdam 25 samples of opium-containing hashish (total number of hashish samples in this period was approximately 150) and in the Hague 30 samples of opium-containing hashish (total number of hashish samples in this period was about 900).

When these samples were received, the question was raised whether they came from the same source or were these hashish samples prepared in various places, either in the Netherlands or abroad.

Analysis

In order to answer these questions, 40 of 65 hashish samples found to contain opium were analysed. Only those samples weighing more than 1 gm were investigated.

It appeared, on microscopical examination, that most of these hashish samples (34 of 40) had a layered, breakable structure in which tea leaves (and caffeine) could be found. The other samples (6 of 40) were of hard and firm consistency and neither tea leaves nor caffeine were found to be present.

For each of these samples the THC (tetrahydrocannabinol) and other cannabinoids, morphine and caffeine content was determined.

Results

The THC content of the hashish samples varied from 2.16 to 10.30 percent. This indicated that the THC content of these hashish samples was "normal" because approximately 50 percent of of 200 randomly chosen hashish samples gave similar results (3).

The morphine content in the samples was found to be low, ranging from 0.01 to 0.27 percent. In the caffeine-free samples, the morphine content varied from 0.01 to 0.05 percent and in the caffeine containing samples it varied from 0.05 to 0.27 percent. Assuming that this hashish had to be smoked in a dose of about 200 mg of hashish per cigarette, no more than 0.6 mg of morphine was then available. This dose is considerably lower than the dose usually taken when smoking opium. Besides this, the chance of pyrolysing the morphine in a cigarette has to be considered greater than when opium is smoked in the usual way, due to the higher temperature in the cigarette. In our opinion the dose of morphine was too low to cause morphine addiction on normal consumption of this kind of hashish.

The caffeine content varied from 0.58 to 0.90 percent. The presence of tea leaves and the rather high content of caffeine in a large number of the samples investigated and the easy way in which a suspension in water could be made with this kind of hashish pointed to the fact that the tea-containing hashish ought to be consumed as a drink (as tea normally contains about 2 percent caffeine, the hashish probably should be mixed with equal quantity of tea in the preparation process).

The presence of minute quantities of morphine in all the opium-containing hashish samples can be explained. There is a good possibility that during the preparation of this type of hashish the same apparatus was used that had been previously used in the preparation of opium, thus introducing, by this method, the small amounts of opium as an impurity.

Literature

1. Honnecker, H. C. Deut. Med. Wochenschrift., 95: 2129-2131 (1970).
2. Dietze, L. Kriminalistik, 395-502 (1970).
3. Verwey, A. M. A. and A. H. Witte. Pharm. Weekblad., 107: 153-164 (1972).

Amsterdam, Netherlands

September, 1972

The complete details as to method and results for all of the hashish samples investigated can be found in the following paper:

D. Eskes^{*}, A. M. A. Verwey and A. H. Witte. Thin-layer and gas chromatographic analysis of hashish samples. Bulletin on Narcotics, 25(1): 41-47 (1973).

*Laboratory of the Municipal Police of Amsterdam, Elandsgracht 117, Amsterdam, Netherlands.

Drug Analysis - A Concept for Realistic Insight into the Illicit

Chemical Market. - Victor J. Pawlak, Do It Now Foundation

The Do It Now Foundation is a non-profit, non-government affiliated organization that has been involved with drug education and crisis treatment since 1967. We are located in Los Angeles and Santa Cruz, California, and Phoenix, Arizona, and from the Phoenix office we maintain a large educational network of drug information for the United States and Canada.

Our analysis program for street drugs originated in April 1971 and has its headquarters in Hollywood, which is near the center of a 7-million countywide population. Every year, tens of thousands of young people come into this area from other parts of the country, bringing with them a very large variety of illicit drugs. As a result, in many areas we are experiencing as high as 60 to 80 percent use of psychedelics, cocaine, barbiturates, amphetamines and opiates among young people.

In respect to the actual analysis, the Do It Now Foundation works with the University of Southern California -- Los Angeles County Medical Center, through Dr. George Lundberg, of the Department of Pathology, and Dr. Ramesh Gupta, of the Drug Investigation Laboratory. All samples are collected through our office and transported directly to the lab.

When the analysis is completed, the results are given back to us to print and broadcast to over one million young people in a 50-mile radius. This is done by donated time over four radio stations and one newspaper (Los Angeles Free Press) which prints 100,000 copies weekly. Each radio station re-broadcasts the 5-minute report four to eight times during the weekend. Listeners and readers are urged to bring in samples for analysis directly to the Do It Now offices. Never once in 17 months have we had to buy or obtain samples other than those collected in this manner. In addition, we receive 500 to 1000 phone calls per week from persons advising us of new drugs, drugs which are causing bad reactions, and requests for information regarding analysis results.

There is a lack of any police involvement or affiliation with our program, as well as no government affiliation or endorsement. We consider this extremely important in order to maintain the level of trust which has been established between ourselves and the youth community. Because of this factor, and because local police do not interfere with our work, the analysis samples turned in come from both users and large and small dealers.

Because a large percentage of dealers trust our judgments, we have been quite successful in establishing a code of ethics among this group in the Los Angeles area. In other words, when a dealer finds out that his mescaline is really LSD or LSD-Phencyclidine, he can be convinced (in many cases) not to sell what he knows to be a misrepresented or potentially dangerous product. Contrary to popular belief, we have found that most of these people really care what their customers are using, particularly the dealers of psychedelics. Consequently, if 70 to 80% of illicit drugs are impure or misrepresented, we could, ideally, through adequate analysis and education, actually decrease by a substantial amount the overall drug abuse in the community.

But have we really to date decreased the amount of drugs in use in the community? Frankly, we don't know. Seven million people in a 10,000 square mile area make it hard to compile any factual statistics. However, we DO know that most users are now dependent on us for information on which drugs may cause bad reactions. And we DO know that the number of bad trips resulting from impure or misrepresented psychedelics has sharply declined in the area since the start of the program.

Also witnessed by us is a sharp decrease in the amount of PCP, (phencyclidine) which is being sold. During the first 9 months of the program, 231 samples were analyzed. Of these, 18% contained PCP by itself or in combination with LSD. In the first 7 months of 1972, out of 529 samples, only 8½% contained PCP. The decline was sharpest after the first media broadcasts which attacked PCP very heavily and made it known to the public that this was a very potentially dangerous adulterant.

Mescaline, as has been shown by other analysis programs, is almost never pure or really what it is supposed to be. Out of 223 alleged mescaline samples turned in, 141 contained LSD only, 38 contained LSD-PCP, 12 contained PCP only, and only 4 actually contained mescaline. It is interesting to note that over twice as many so-called mescaline samples were turned in as LSD samples. Many users feel that LSD is too harsh a chemical, and so they attempt to buy mescaline or psilocybin because they are reputed to have weaker effects. Psilocybin nearly always turns out to be only LSD. Broadcasting of this data has tended to discourage those who are trying to avoid LSD from taking either mescaline or psilocybin as alternatives.

In June of this year, we started the first quantitative analysis of street drugs. Though the results are as yet inconclusive, we have been able to isolate two instances of heroin samples, one which was 30% pure, the other 97% pure, which would have otherwise caused immediate

death to users. The average purity of heroin in our area, incidentally, we estimate to be one to five percent. Recently in San Antonio, Texas (an area with no analysis program), 12 heroin addicts died within 24 hours from what was estimated to be 30 % pure heroin. Clearly, quantitative analysis has a very needed place regarding the opiate drugs.

Though I won't go through all our statistics now for each individual drug, let me say that in general, our findings agree almost totally with our colleagues in Europe and North America. There seems to be very little difference between the qualitative analytical results. The public appears to be equally gullible and uneducated on both sides of the Atlantic. There is widespread misconception in California that if a substance comes from a far away exotic place, such as Europe, that it will somehow be better. From what I understand, European young people also believe their drugs could possibly be better if they come from California. The grass always seems greener on the other side of the fence.

Because of what we feel is a great indication of increased public awareness regarding adulteration of street chemicals, we strongly urge analysis programs to involve themselves with mass media education. Furthermore, we strongly urge those communities without analysis programs to start them wherever possible. Otherwise, we can only hope for largely unsatisfactory results in our efforts to curb the rising trend of drug abuse in our countries.

Keynotes of a paper presented to the 30th International Congress on Alcoholism and Drug Dependence, Amsterdam, The Netherlands, 6 September, 1972.

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USC Medical Center Drug
Investigation Lab - Do It Now
Foundation Street Drug Analysis
Program. Results for April
1971 to July 31, 1972.

Sold as:	LSD	LSD-PCP	PCP	LSD-Amphetamine	Psilocybin	Mescaline	Marijuana	Hashish	Cocaine	Cocaine-Local Anesthetic	Opium	Heroin	Local Anesthetic	Amphetamine	Methamphetamine	MDA	STP	Barbiturate	Heroin-Procaïne	DMT	Other	No Drug	No Results	Totals
Mescaline	14	38	12	2		3							2	1			2				10	4	8	223
LSD	92	4												1			1				1	1	1	101
Psilocybin	44	8	1		1	1							1								1		5	62
THC		3	24										4								2			34
Marijuana							78																3	81
Hashish							3	14																17
Amphetamine														21								5	2	28
Methamphetamine														4	2									6
MDA	4	1	1										1	1		8								16
Cocaine			3						21	16		1	8	1				1						51
Barbiturates																		19			4		1	24
Heroin												3							2			1	1	7
Opium							3				4	1									2			10
DMT																				1				1
Psilocin	2	1																						3
Other	2	1	3				1						3			1					5		5	21
Not Identified	16		2		1	4		1	2		2		4		1	1	7				15	7	1	62
Totals	301	56	46	2	2	4	90	14	22	18	4	7	19	33	2	10	4	27	2	1	45	15	25	747

Comment

The following list of references consists of those papers that have been published on the composition of street-drugs during the past four years. This modest list represents the total number of publications (that we are aware of) that are readily available to the scientific community. The editors would appreciate copies of any papers that we may have missed.

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