

Hiding in Plain Sight: An Exploration of the Illegal(?) Activities of a Drugs Newsgroup

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Abstract: The Internet² is undoubtedly one of the most important communication advances of recent times, with the World Wide Web constituting the part that draws the most attention. Other components such as Usenet and Internet Relay Chat, however, largely remain abstruse. This article provides an examination of a drugs' newsgroup, which revealed that its activities provided a fertile environment to learn how to manufacture and distribute synthetic drugs and their precursors. This adds a new dimension to the way in which drugs are made available to consumers. While existing laws support the possible prosecution of group members, official attention to newsgroups with regard to preventing or reducing drug offending remains largely unknown, at least in the public domain.

The Internet is the most important new communication tool of recent times. As a global medium, it allows people with similar interests, from various cultures and life experiences, to overcome barriers of time and distance in order to interact. Unlike telephone communication, the Net allows a degree of, if not total, anonymity. The Internet 'allows people with similar interests, legal or illegal, to communicate easily by overcoming previous restrictions imposed by time and distance and, in some cases, national and social restraints' (Schneider and Sutton 1999, p. 40). This easy exchange of ideas and beliefs, when questionable, can occur with little or no fear of official censure. More fundamentally, it has been argued that this step change in communication means that people can live in their favoured worlds for all or most of their waking lives, thus substantially removing the environmental constraints on personality and attitude development (Pease 1997). Be that as it may, the changes wrought by these increases in the accessibility of like-minded people, even when they are like-minded in obviously dangerous ways, have yet to be studied thoroughly.

While this technology facilitates productive, legitimate interaction, it can also open a 'Pandora's Box' of criminal opportunity. For example, the Internet can provide information on how to build bombs, where to access materials on race-hate, where and how to purchase an array of personal weapons, how to kidnap a child, or how to manufacture illegal drugs. None

of these things are hidden or difficult to find on the Net and the vast majority of this information can be published on-line and obtained legally in the UK and elsewhere.

For those activities that are questionable in terms of legality, issues become very murky. Not only can criminals hide in terms of identity and location, but also the types of crimes being committed may not be a high priority for police and their high-tech crime units to investigate. Jurisdictional issues also confound the way in which law enforcement can respond to potential Internet crime. These issues indeed provide a challenging set of circumstances for police at both national and international levels.

The main focus of this study is on the Usenet, which is the Internet's primary discussion area, containing over 30,000 different discussion groups with topics ranging from sewing to rare sexual practices. The Usenet is described as the Internet's community that meets to talk about any subject imaginable (Kennedy 1998), as well as a system for sharing and exchanging messages electronically worldwide.

The purpose of this exploratory research is to examine the nature and activities of the newsgroup alt.drugs.chemistry (ADC) to see what activity is taking place. This group appears to operate like a free, Open University for drug making and taking by offering tuition on how to manufacture substances such as Ecstasy, amphetamine, methamphetamine and LSD. Accounts of possible forms of criminal behaviour are presented from group's postings.

The Net and High-Tech Drugs

According to the Internet Watch Foundation (IWF), there were eleven million Internet users in the UK in 2001. IWF's global estimates of users at the end of 2002 sit at 490 million—a rise from 242 million in January 2000. The projected number of users by 2005 has been calculated at approximately 765 million, worldwide (see www.iwf.org.uk). Although there are no data available as to how many of the users engage in illicit behaviour, anecdotal evidence suggests that:

[s]o-called cybercriminals roam the electronic environment, exploiting jurisdictions which have not developed domestic controls on cybercrime, to commit crimes such as unauthorized access or 'hacking', fraud, computer vandalism or sabotage, drug trafficking, distributing child pornography, and cyberstalking. (United Nations 2000a, p. 12)

Additionally, Mann and Sutton (1998) claim that the Internet 'provides a uniquely safe environment for many people to acquire illegal benefit from the enterprise of others' (p. 202). For example, when a message or response to a specific question is posted in a newsgroup, everyone who subscribes to that newsgroup is able to benefit and learn from the response³. As Mann and Sutton (1998) suggest, this is one of the greatest possible 'dangers' of Internet technology today—the fact that criminal techniques that would have been passed by word of mouth, can now be transmitted to a much wider audience within a matter of seconds.

Although the Internet is most commonly associated with the World Wide Web (WWW), it comprises three main parts: the WWW⁴, Internet Relay Chat (IRC)⁵, and Usenet⁶. IRC and Usenet are not generally the territory of casual or inexperienced Internet 'surfers' and are often ignored by the public, the media, police and regulators. These areas, however, provide a relatively anonymous environment where illegal activities can occur with little probability of coming to the attention of the police, as the majority of *known* police activity has been centred on WWW activities. Little information is widely available about what takes place in chatrooms or in newsgroups. Despite Mann and Sutton's (1998)⁷ call for criminologists to undertake more research on the Usenet, there have been no published studies since, of which the author is aware, that have focused on newsgroups and the role they play in the transmission of criminal techniques.

The Internet is a fertile environment not just for the transmission of criminal techniques, but also the commission of crimes difficult to detect or prosecute (Schneider and Sutton 1999). The Internet, particularly the Usenet, may create new avenues of criminal temptation and opportunity for crime by users who may have never considered committing crimes because of a lack of know-how or opportunity.

While the Usenet is divided into nine main hierarchies and numerous secondary hierarchies⁸, the 'alt.' hierarchy contains discussion groups that are alternative or anarchic in nature. The 'alt.' hierarchy has been described as the:

...unregulated black sheep of the Usenet family. Anything goes, here, and indeed whenever you read a panic-stricken account of filth on the Net in the tabloids, it's probably related to something within the alt realms. (McCauley 1998, p. 65)

High-Tech Drugs

Whenever new technology becomes available, drug dealers seem to find a way to utilise it to enhance their trade. When personal pagers became widely available, then, there would have been pressure to be seen to use one. The same held true when mobile phones became fashionable. If drug dealers are fast to take advantage of new technology, the benefits presented by Internet technology should be extremely appealing and should come as no surprise when exploited. With it, drug dealers would not have to hide in back alleys or on street corners to make their transactions. Rather, deals could be arranged via IRC, where private conversations are virtually impossible to trace or monitor. Additionally, if Internet technology were to be used to its ultimate capability, dealers would no longer have to rely on the complicated trafficking chain of middlemen who import substances from abroad, as in the case of heroin or cocaine. Instead, they could hire a chemist who can cook synthetic substances in the privacy of their homes with relative ease. The Net can also help dealers research the market demand and value of a given synthetic substance—all as a result of a few keystrokes. The technology opens up a whole new world of opportunities for bringing drugs to consumers.

While there is limited evidence about how major criminal organisations use the Net, the UN recognises the possibility that the: ‘risks presented by the use of such facilities in the supply of or incitement to manufacture illicit drugs is something to which states need to remain vigilant’ (United Nations 1999, p.16). This is an area where such use must be commonplace, but informed discussion of it, and tactics used against it, will be restricted for security reasons, particularly in the febrile atmosphere following September 11th 2001.

Organised crime groups are fast to exploit new forms of technology, and so it should come as no surprise to learn that a new generation of Colombian drug traffickers has already begun to use the Internet and other technologies to facilitate their drug smuggling activities. For example:

U.S. and Colombian officials discovered the traffickers were using technology such as Internet chat rooms protected by firewalls and a computer on a ship off the coast of Mexico. (Narcotics Enforcement and Prevention Digest 1999, p.2)

US government computers took 24 hours to crack a 30-second transmission by the smugglers.

By publishing or posting street drug prices for cities throughout the world, the Internet plays a contributing part to the trade of illegal drugs. Organised crime groups can examine the conditions of local drug markets anywhere in the world by analysing the types of drugs in circulation, their prices and availability. Once these data are analysed, organised crime groups can make decisions about diversifying their activities or expanding their trafficking routes.

At the ‘disorganised crime level’, the abundance of formulae and drugs manufacturing advice on the Net can serve as an enticement to people to enter into clandestine synthesis. Additionally, details on sources of precursor chemicals and laboratory equipment may contribute to the proliferation of home pharmaceutical ‘plants’. Individuals and crime groups can easily receive tuition and support from newsgroups, particularly ADC, to co-ordinate production and distribution networks.

By allowing the readily available information on drugs to thrive on the Net, drug formulae and accounts of individual experiences can only serve the purpose of exciting curiosity and normalising deviant and potentially dangerous behaviour. Detailed information on how to manufacture drugs and obtain precursor chemicals are part of the library of Net resources. Spinney (1997) reports that the availability of synthetic drug ‘recipes’⁹ on the Internet is to blame for the surge in the increase in worldwide consumption rates of synthetic drugs including amphetamine and Ecstasy. The United Nations (1997a) *World Drug Report* concludes that the proliferation of illicitly manufactured synthetic stimulants has:

clearly been correlated with technological innovations [and] the widespread availability of synthetic ‘recipes’ on the Internet...may also contribute to the spread of abuse. (p. 43)

Synthetic substances are fulfilling a growing trade in the illegal drugs markets. According to the United Nations (1997b):

[T]here is a greater danger that once a large enough body of Ecstasy abusers has been created, the market for the drug may continue long after the dance craze has become a memory. (p. 5)

Synthetic drugs have complicated the illegal drug problem worldwide due to the ease with which they can be either made clandestinely or diverted from legitimate sources. Synthetic drugs have become increasingly popular. Approximately 29 million people worldwide (0.5% of the global population and 0.7% of those aged 15 years and above) take synthetic drugs (United Nations 1997a, 2000b).

Amphetamine-type stimulants (ATS) are the second most widely abused substance after cannabis in the UK. In addition, the UK is the largest market for ATS in Europe (see Ramsey and Partridge 1999). The strongest growth in recent years is abuse of Ecstasy type drugs, most notably MDMA. However, interdiction and prevention policies have remained firmly focused on plant-derived substances such as heroin, cocaine, and cannabis. According to Yoshida (1997), until the late 1970s, relatively little was known about the use and effects of ATS. Klee (1997) notes:

[a] recreational drug that is reasonably well controlled and produces few casualties perhaps takes lower priority unless public pressure against it is set into motion. (p. 25)

International Drug Conventions, Synthetics and the Net

The UN international drug control conventions form the basis of national drug policies. Member states are encouraged to use the international conventions and treaties as a foundation in the development of their national drug policies and as a source of co-operation between member states when combating illegal drugs. Social and economic circumstances have, for a number of years, led to national agreements on tackling drug-related problems.

The 1971 Convention on Psychotropic Substances brought synthetic substances, ATS, sedative-hypnotic agents and hallucinogens, into the public policy arena. The UN and its member states have acknowledged the risk posed by synthetic drugs, which has increased due to (i) the number of 'friendly' outlets available to the clandestine chemist who wants to purchase necessary precursor chemicals and laboratory equipment, and (ii) the presence of detailed chemical formulae and tuition on the Net.

The UN has outlined various recommendations on how to address the Net's role in the rapid dissemination of drug information. At the time of writing, no tangible provisions exist that outlaw the potentially harmful Internet practices relating to the clandestine manufacture of synthetic substances. Article 10 of the 1971 Convention declares that member states should prohibit¹⁰ the advertisement of psychotropic substances. However, no operational definition of 'advertisement' is provided, which presents problems to those member states wishing to develop legal remedies against

Internet outlets that provide information on how to manufacture and distribute the substances.

Perhaps one of the main reasons why information about synthetic drugs is on the Internet is that ATS are relatively simple to make, so long as one has formulae (see United Nations 1997a; Morrison 1997). Manufacturing techniques are available on the Net and tuition is provided via newsgroups, so the probability of cooking a good batch of pills in the privacy of your home is high. While methamphetamine production is more dangerous, those who want to cook it simply need to collect the 'recipe', go to the appropriate newsgroup to post questions to experienced 'ChemHacks'¹¹ or other clandestine chemists on particular production issues and wait for instruction.

Remberg (1997) warns that the growth of the synthetic drugs industry is likely to continue, especially with readily available information on clandestine manufacture of new substances along with availability of necessary elements. New synthetic derivatives with unknown pharmaceutical properties and effects, known as designer drugs, are constantly appearing on the illicit market. Information on the severity of their effects, reactions, and impurities remain unknown, but these uncertainties do not offset their desirability. Designer drugs are developed: 'by clandestine chemists with deliberate objectives of circumventing legal restrictions on possession and supply' (King 1996, p. 15). In sum, designer drugs present a serious problem for regulators because their molecular structure is modified in such a way that the resulting product is no longer illegal, despite maintaining the potentially harmful effects of more conventional substances.

Research Methodology

Because it is a relatively new area, there is no established methodology for conducting social science research on the Internet. In this case traditional observational methods have been adopted to study this new 'environment'. Exploratory studies of this kind allow researchers to become familiar with the subject area (Fitzgerald and Cox 1994), so that areas of interest or concern can be scrutinised using rigorous techniques later. This research is essentially exploratory and descriptive in nature. Since so little is known about newsgroups, still less about drug-related newsgroups, the research seeks to identify important aspects of these emerging deviant forums.

Research Process and Data Collection

ADC was chosen for study because of the potential contribution ChemHacks make to the growing problem of synthetic drug manufacture and distribution. The first step of the research was to locate and read documents that explained the purpose of the group. This was done prior to lurking¹² in ADC. The main reason for examining these documents was to see why the group was created—what void it filled in the virtual world. The creation documents are normally detailed in explaining if the group is moderated or unmoderated¹³. Additionally, the purpose of the newsgroup

is made known, which helps people decide whether or not they want to engage in the discussion. Documents that were examined for this study include: Request For Discussion (RFD, a document that provides justification for the creation of the group); charters; and the Frequently Asked Question document (FAQ), which are all normally prepared when a newsgroup is created.

The second stage of the research involved the analysis of the group's postings. Qualitative data, in the form of these postings, were collected in order to develop an understanding as to what takes place in this particular newsgroup. Messages from ADC were downloaded from a local ISP's newsfeed once a week from 4 July through 24 August 2000. A total of 1,266 postings were collected, consisting of 354 original messages complemented by 912 responses¹⁴. Messages were searched for key phrases or words that might indicate that tuition on drug making or trafficking is proffered. Postings were read in their entirety to find patterns of interaction between group members. The inductive process led to the messages yielding two categories of findings. The first examined the activity of the group with the purpose to assess its potential criminality. The second revealed the structure and roles that emerged as a result of the interaction between members. Findings about the former are reported here, while those relating to the latter will be reported elsewhere.

Findings

Background Information: RFD, Charter, Description and FAQ

Information on a newsgroup's aim and description is usually archived on the Internet or Usenet. Finding charters, descriptions, RFDs, and FAQs is supposed to be a relatively uncomplicated process. However, for ADC, this was not the case. After a thorough search of archives, no discussion document (RFD) or charter could be found. RFDs for two related newsgroups, *rec.drugs.cannabis* and *rec.drugs.misc*, were located with the hope that ADC's documents could be located.

In 1995, the main newsgroup used for drug discussions was *alt.drugs*, which began in 1986/87. According to its users, the volume of postings reached intolerable levels rendering it a 'chaotic mess' (see www.landfield.com/usenet/news.announce.newsgroups/rec/rec.drugs). The newsgroup began to splinter into several sub-groups before consensus could be reached about how to address the overcrowding problem. Some of the sub-groups were considered poorly thought out—lacking evidence of need or purpose. ADC appears to be one of these splinter groups. Because of this, documentation that specifies the purpose, description and discussion of ADC is sparse. No charter for the group could be located and only a very brief description of ADC could be found: 'a *discussion* of drug chemistry and synthesis'. There is no assertion that ADC condones activities such as trading or selling controlled substances, as *rec.drugs* does in its 'announcement'¹⁵. From the description, it appears, on the surface, as if the purpose of the ADC is simply to *discuss* drug synthesis techniques and issues.

The FAQ

Finding the group's FAQ also proved to be a rather arduous task. The FAQ could not be immediately found after subscribing to the group, which is usually the norm. Various web archives were searched yielding four versions of the document, with the last being the most up-to-date. There are five categories in the FAQ, which contain the 'dos and don'ts' of the group, as well as general chemical synthesis information. Section 1 explains that it is important to avoid repetitive questions so that 'patient' regular members are not bothered by having constantly to answer the same questions. Readers were told to search archived postings as a first source.

A significant point is raised about the acquisition of chemicals in Section 2 of the FAQ, for example, a general notice is given that: 'clandestine chemists don't want to share their sources, because once they do, they always seem to get shut down (or worse)' (halcyon 1999, p.1). It warns that if an underground laboratory occurs, official investigations will make enquiries as to where the precursor chemicals were obtained. Information on where to obtain precursor chemicals, specifically red phosphorus, diethyl ether, sodium hydroxide, and iodine, is given.

From this section alone, the group's activities become clearer. If the group exists only to *discuss* drug chemistry and synthesis, why would the FAQ present a general warning about 'leaving a paper trail' when obtaining precursor chemicals? Also, if discussion is the purpose of the group, why would the FAQ contain information on the best way to acquire precursor chemicals, some of which are controlled substances? Comments like this should serve as a flag to readers or proactive law enforcement investigators when subscribing to a newsgroup.

Section 3 of the FAQ deals with the issue of synthesis of particular substances. References to both books and websites are given in order to obtain the specific procedures on how to manufacture methamphetamine, GHB, MDMA, and LSD. According to the Forensic Science Service¹⁶ (2000), many of the named sources contain accurate information on how to make the drugs. In addition, information is given on how to synthesise certain chemicals and reagents used in the manufacturing process.

Myths in circulation about easy ways to make LSD and methamphetamine are discussed in Section 4. The final section of the FAQ gives a biographical sketch of 'long-time regulars' of ADC.

The Nature of ADC

ADC claims that its purpose is to *discuss* clandestine synthesis of illicit substances. Generally, ADC is a sophisticated group, in terms of organic chemistry, that supports the 'right' to make and consume illegal and legal drugs. Members enjoy the challenge of synthesising illicit drugs and they enjoy taking the drugs that they produce. Members are supportive of those conducting experiments and operating clandestine laboratories. When newcomers post earnest questions, most members are responsive.

ADC says that it aims only to provide curious minds with expert advice and counsel on how safely to cook illicit substances. While making the

synthetic substances may be challenging, it does not require the specialised technical skills required for hard- and software hacking. It has been reported that with step-by-step instructions, complete with diagrams and pictures, anyone who has an average level of intelligence and a strong enough desire can manufacture the substance of their choice.

Specific formulae for drugs are generally not provided in the newsgroup. When a person asks how to synthesise a particular substance, ChemHacks will provide various references to find the desired recipe. Sources offered include websites dedicated to specific drugs; websites dedicated to the clandestine manufacture of drugs; and books, which are readily available through on-line bookstores.

Group Cohesion

Without the ChemHacks, there would be no group, ADC. This is not to say, however, if one central ChemHack left the group, the group would wither away. The group will survive as long as a respected person, who possesses the technical expertise in drug synthesis, fills the vacancy. In this way the group is like a hydra, you cut one ChemHack out of the picture and another one soon enters.

One of the respected members, Eleusis, who is named in the FAQ, actually left ADC and later wrote an account of his experience as a ChemHack (see <http://users.lycaenum.org/~chemist/links.html>). Interestingly, Eleusis had no background in organic chemistry or in drugs. Being intrigued with both, he decided to embark on a 'chemical journey'. Eleusis claims that his journey began in Spring and by late winter, he was:

already posting to a.d.c. It took so much work to learn how to make MDMA that I decided I was going to share what I learned so that others would not have to repeat my labors. However, I had serious misgivings about sharing because my quest was one for knowledge and experience while, I knew, for most others it would be for purely economic reasons... Though I knew my posts would be put to use by those less scrupulous, I posted nonetheless for the benefit of those who were. (Eleusis, ADC 2000)

Eleusis claims to have left ADC after a shipment of chemicals failed to arrive at his home. He believed authorities confiscated the package and at that time, decided it was time to quit cooking MDMA. He managed to synthesise MDMA for about a year before coming to the attention of American authorities. He was arrested, charged and at the time his account was published on the Web, 1998, was awaiting sentence.

The Importance of the Internet/Usenet

One of the most important revelations made by Eleusis is that from his experience during his interrogation, the American Drug Enforcement Administration (DEA):

either *does not know about a.d.c.* or they *do not care*¹⁷. Yes, friends, hard as it may be to believe, outside of 'did you get the recipe off the internet' question, they didn't ask me jack shit about the net. (Eleusis, ADC 2000)

This is a clandestine chemist who was active in posting messages to ADC and who provided information on how to manufacture MDMA. There are lessons to be learned here. While the number of active investigations pertaining to the Usenet and IRC are unknown due to obvious security reasons, various interviews with members of police officers in England and the United States reveal that the majority of police operations are limited to cases of fraud and child pornography¹⁸.

Those who posted to ADC were aware of the power and usefulness of the Usenet, but they displayed incidents of worry that law enforcement might be monitoring their postings. Newsgroup members discussed the possible legal consequences of overtly discussing drugs, their use, and their manufacture. According to some members, this directness could result in unwanted legal attention, as well as the possibility of an outright ban. The following exchange reflects their concern:

GHB set a strong precedent for this. Usenet postings and Internet sites were one of the prime contributors to GHB being noticed and subsequently made illegal [in the USA]. These newsgroups are read by hundreds of thousands of people at least. (ADC 2000)

One news article posted in the group discussed the UN concerns about drugs. A quote from the former head of the UN Drug Control Programme¹⁹, Pino Arlacchi, prompted the following important comment:

He also said, 'The Internet is more and more important in providing exchanges of information ... and we are very worried about it'. And well they should be. The one thing the propaganda of prohibition cannot handle is the flow of information. What if the truth were to come out?!?! (ADC 2000)

Fear of Detection

Consistent with Mann and Sutton's previous study on deviant newsgroups, members of ADC openly acknowledged that authorities were monitoring their postings. To avoid detection, messages containing criminal content, or in which crimes are planned, can be hidden from view. In order to exchange extremely risky messages, they will use personal email, encryption, and private IRC. These technologies permit the criminal behaviour to be driven further underground, thus making law enforcement intervention practically impossible. At the time of writing, computer forensics is unable to track and capture evidence from private IRC²⁰. Undoubtedly, newsgroup users are aware of this and take advantage of the technology.

The topic of the US Federal Bureau of Investigation (FBI) monitoring traffic to servers was addressed in a posting from one member. This produced a thread of nine messages from Chem Hacks and others. Various ways to elude the FBI's monitoring techniques were provided. These included an alternative to email (www.ftpmail.com) and the use of encryption/PGP. One of the Chem Hacks gave instructions on how to bypass some of the problems with PGP²¹:

Use www.counterpane.com/passsafe.html. You write your password into the safe first, and then copy it out for use in encrypting/decrypting. This way you can be *sure* that you are using the same password for both. I'd be [shit out of luck] without it. (ADC 2000)

Another ChemHack provided these ideas on how to manoeuvre around the FBI and other agencies wanting to intercept electronic transmission:

Heh....As for your right to private communications, encrypt them. PGP for e-mail. ssh for interactive sessions. ssl for secure web traffic and other streams. Ipsec for *everything,* if you've got the clue for it. The feds can suck on my 8196-bit PGP key... (ADC 2000)

Criminality

Members of this group appear to be active in the clandestine manufacture of illicit substances. If time and resources permitted, criminal investigations could target the clandestine chemists who were manufacturing illegal substances. Members of ADC also posted messages that offered tuition in other types of criminal activity. For example, one member suggest the following:

Posting 1: I travel to eastern Europe sometimes, and may be able to obtain chemicals, being vague, a little paranoid goes a long way. What should i [sic] look out for? Grignard reagents, Lithal? Any chemicals tagged in UK/US used in MDMA manufacture? (ADC 2000)

Posting 2 (Reply): Since it seems like the fifth letter of the alphabet is what you're after, to be vague and paranoid, here are some ideas. First, find out what is easily available locally. Afterall there's no use smuggling something that the corner grocery has. With that in mind, one should also contemplate doing the synthesis in a rented room in eastern Europe (never use the same location twice). The benefits of this are that you don't have to carry as much material back with you. The downside is that what you do carry back is what the authorities are looking for. Also, of course there is the problem of being perceived as competition by the local underworld, leading to much unpleasantness. Now, so far as specific chems, there's the usual suspects. Safrole, isosafrole, 3,4-methylenedioxyphenylacetone, methylamine, piperonal, lithium, aluminium hydride, and sodium cyanoborohydride top the list. The stranger, multi-step precursors are probably available locally. (ADC 2000)

Another smuggling question dealt with how to carry drugs on board an airline:

Posting 1: I jad [sic] a dream that I was going to Vegas tomorrow and I want to bring some G[GHB], but I did not dream any way to get it ther [sic]. Has anyone [sic] ever dreamed ways to bring this stuff on a plane? (ADC 2000)

Posting 2 (Reply): Get a diabetic ID bracelet, ID card and a vial of insulin. Go to the pharmacist, convince them that you ran out of it and needles. Rinse out the vial with alcohol. Fill with G. Put with the needles in a carrying case. Buy a couple plastic soda bottles with caps. Go to the bathroom—pull out a few cc—add to soda—drink. If you OD, they'll think you're having a diabetic reaction and give you glucagons.

Won't harm you and they'll leave you alone...better than getting taken to ER and get expensive treatment. (ADC 2000)

One of the ChemHacks provided his views on the considerations that a ChemHack has to deliberate when deciding on what drug to synthesise:

First, off comes the market, as with any business. There must be enough demand to make the production worthwhile. Also, for the same basic material, cheaper forms are more popular of course. The other factor, as you know, is the cost of production, which is based on four factors: the cost of learning and setting up the production; cost of obtaining the raw materials; and of production itself (both per gram; and the usual dose weight; higher weights mean higher costs to produce.) Also note that 'cost' here is the sum of the monetary cost, legal risk, and production risk. I'll list these as demand, material costs, production, dose.

Drug	Demand	Mat'l Cost	Prod Cost	Dose
LSD	Hi	Hi	Hi	Lo
Shrooms	Hi	Lo	Mod	Hi
Psilocybin	Lo	Hi	Hi	Lo
Mescaline	Mod	Hi	Hi	Hi
DMT	Lo	Hi	Hi	Lo
2CB	Lo	Hi	Hi	Lo
Meth	Hi	Mod-Lo	Mod-Lo	Mod
MDMA	Hi	Mod-Hi	Mod-Hi	Mod
GHB	Hi	Very Lo	Very Lo	Hi
Marijuana	Hi	Lo	Hi	Mod
Saviad	Lo	Lo	Lo	Mod

(ADC 2000)

According to this ChemHack, consumer demand, material and production costs weigh heavily in the decision-making process of which drugs to manufacture and distribute. Clearly consumer demand alone cannot dictate what a chemist makes and sells for profit. Some drugs are more dangerous to manufacture and are more difficult to make in terms of chemistry and laboratory concealment. Knowing how and where to acquire the necessary precursor chemicals and chemical equipment can also play a part when deciding which process to undertake. LSD, for example, is a difficult drug to make in terms of materials and production. While the demand for it is high, the yield from the production process is relatively low compared to the amount of risk and effort it takes to make it. When compared to other highly demanded drugs, such as MDMA, the yield from the process might well outweigh the potential risks and production costs given its money making potential.

Discussion

The Internet, while an important communication tool, presents law enforcement and regulators with a challenging environment where traditional crime prevention and reduction techniques may well fall below expectations. The scale of the Internet's potential to provide criminal

opportunities is unknown, but it is suspected to be high. Of particular interest is the way in which the Internet might change traditional sources of drug supply given the increase in demand for synthetic substances such as Ecstasy and methamphetamine. These substances can be manufactured in local clandestine laboratories, thus making drugs easily and quickly available to drug dealers and consumers. This new generation of drug manufacturing and trafficking might well take the public, police and policy makers by surprise. While the UN has acknowledged the potential dangers of the role of the Internet in the proliferation of synthetics, most drug policies remains firmly grounded in plant-derived substances. Resources permitting, closer attention could be paid to the Internet and the role it plays in facilitating drug manufacture and distribution.

Postings from a newsgroup that focused on the manufacture of synthetic drugs were examined to gain an understanding as to what members actually did. The group presents itself as nothing more than a *discussion* group. However, the study suggests that ADC appears to be one in which experts on the chemical synthesis of illicit substances offer tuition to those who are less experienced at making them. The tuition exceeds what a reasonable person might see as merely discussion. The tuition provides enough information so that those who desire to manufacture clandestinely certain illegal substances are able to do so. In addition, ways of either gaining access to or making the necessary precursor chemicals were offered in the group's postings. Ways of distributing the drugs were also presented to group members. The tuition offered in ADC could also provide the foundation for violations of various criminal laws²².

The ease with which the drugs can be produced and the obvious desire to 'know how' should serve as warnings to law enforcement officials and policy makers. Synthetic substances discussed in ADC are fast becoming the drugs of choice worldwide. ATS is currently the second most consumed drug in the UK, as in other countries. The demand for the drug coupled with the simplicity of its production may be setting the stage for a serious escalation in future consumption and manufacture.

While opiates and cocaine have historically taken interdiction priority over other types of illicit substance, global statistics show that abuse and production patterns are shifting toward synthetics. In addition, enforcement efforts to curb criminal opportunities and activities on the Internet have largely addressed the offences relating to the sexual abuse of children and terrorism. The entire subject of drugs and the Internet is relatively overlooked. This oversight could be remedied by:

- Appreciation of the magnitude of potential harm being presented by the consumption and clandestine production of synthetic substances;
- Policy directives in law enforcement that extend beyond child pornography Internet investigations;
- Appropriately trained personnel in proactive Internet investigations aimed at synthetic drugs, as well as in computer forensic analysis; and
- Necessary equipment being made available to investigators.

This study brings to light the problem of synthetic drugs and how the Internet plays an important role in the dissemination of information on how to clandestinely manufacture substances with relative ease. Individuals who possess an expertise in organic chemistry, as well as in clandestine drug chemistry offer tuition to *anyone* wanting to learn the process. The Internet appears to be the main medium for communication between those 'conspiring' to produce the illicit substances.

The manner in which this potentially dangerous and harmful material is transmitted has implications for law enforcement agencies worldwide. National and international laws are most likely being broken—in plain view of anyone lurking in certain newsgroups. Those who post the information are flaunting the fact that the law enforcement community is failing to proactively police this area of criminality.

Law enforcement agencies might well be looking at the communication of newsgroups and IRC with the aim to prevent crime. Additionally, international and national agencies might be actively pursuing those who are trafficking drugs via the Net. However, evidence to support this remains sparse. Rather, on the surface, it appears as if the main focus of Internet related investigation remains firmly situated in the area of child pornography, and in some cases fraud and terrorist activities. In the aftermath of September 11th, it is no surprise that terrorism is at the forefront of enforcement and intelligence community activity. Communication transmissions are being monitored in relation to terrorist activities. There is limited evidence that similar transmissions are being monitored for drug trafficking activities. Perhaps the next phase for the intelligence community is to begin proactive monitoring and investigation for Internet related synthetic drug manufacturing.

Notes

- 1 The author thanks Professor Ken Pease for his assistance in preparing this article. An additional thanks is extended to Dr Michael Sutton for his help on earlier versions of this article and for his initial support. Additionally, I would like to thank the Home Office Policing and Reducing Crime Unit for funding this research project, which in no small way stretches the boundaries of traditional criminology.
- 2 Also known as the Net and, as is usual practice, the terms Net and Internet are used interchangeably in this article.
- 3 In addition, postings are also archived, indefinitely, on various web sites.
- 4 The WWW is a system of linked web sites existing on the net.
- 5 The IRC is where 'real time' conversations can take place. These conversations are 'live' and are not regulated or monitored.
- 6 Also known as Newsnet. It is the area of the Internet that houses newsgroups.
- 7 Their research on two deviant newsgroups was the first systematic, academic study on the Usenet.
- 8 For a complete description of all nine tiers of the hierarchy, see http://livinginternet.com/u/uw_hier.htm
- 9 The use of the word 'recipe' appears to irritate clandestine chemists. They quickly mock police and researchers who equate chemical formulae with baking instructions.
- 10 To be done with regard to each member state's constitutional provisions.

- 11 Slang for clandestine chemists.
- 12 Lurking is the practice of reading newsgroup postings without actively participating. 'Netiquette' expects that a person lurks before actively posting messages to the group.
- 13 An unmoderated group is one where postings appear on screen without any interference. In moderated groups, a person within the group screens postings to ensure that they are 'on topic'.
- 14 Known as 'threads'.
- 15 This group specifically states that attempts to sell or trade controlled substances are prohibited. See www.landfield.com/usenet/news.announce.newsgroups/rec/rec.drugs
- 16 Personal conversation with forensic chemist from Forensic Science Services.
- 17 Text that is enclosed by * on the Internet signifies that the text is bold or otherwise emphasised.
- 18 The researcher, as part of a separate study, interviewed a number of investigators who were active in Internet related operations, both in the US and the UK. When asked about where their priority lay, the vast majority of officers said that it was web-related complaints of child pornography, fraud, and occasionally stalking. The Usenet and IRC were not mentioned as areas of the Net that drew their attention. The paper was a 'law enforcement eyes only' document that explored issues relating to Internet crime and its investigation.
- 19 Now known as UN Office on Drugs and Crime.
- 20 Personal conversation with UK computer forensic investigator from National High Tech Crime Unit.
- 21 In the UK, the RIP legislation might be a useful tool in these circumstances.
- 22 After discussions with UK police chemistry officers and investigators, it is believed that the following UK laws might cover the types of activities occurring in ADC: Criminal Responsibility (paras.1-301); The Misuse of Drugs Act 1971 (paras. 8-21203; paras.8-21204); The Criminal Law Act of 1977 (paras.8-4328; paras.8-4329). In the US, where the legal system is far more decentralised, Title 21, Section 843 (US Federal law) makes it unlawful for anyone to 'knowingly or intentionally...use any communication facility in committing or in causing or facilitating the commission of any act or acts constituting a felony'. This appears to address the issue of sharing drug manufacturing and distribution information.

References

- alt.drugs
alt.drugs.chemistry (ADC)
- Fitzgerald, J.D. and Cox, S.M. (1994) *Research Methods in Criminal Justice: An Introduction*, 2nd ed., Chicago: Nelson-Hall.
- Forensic Science Service (2000) *Drug Abuse Trends, 12*, London: The Forensic Science Service.
- halcyon (1999) 'The ALT.DRUGS.CHEMISTRY (a.d.c.) FAQ, v0.4'.
http://livinginternet.com/u/uw_hier.htm
<http://users.lycaeum.org/~chemist/links.html>
- Kennedy, A.J. (1998) *The Internet: The Rough Guide*, London: Rough Guides.
- King, L.A. (1996) 'Designer drugs related to amphetamine (1990-1996)', *Clandestine Laboratory Investigating Chemists Association, Inc.*, 6, 15-16.
- Klee, H. (Ed.) (1997) *Amphetamine Misuse: International Perspectives on Current Trends*, Amsterdam: Harwood Academic Publishers.
- Mann, D. and Sutton, M. (1998) '>> NETCRIME: more change in the organization of thieving', *British Journal of Criminology*, 38, 201-29.
- McCauley, J. (1998) 'Newsgroups: more fun than they look—honest', *Net*, 49, 64-9.

- Morrison, S. (1997) 'The dynamics of illicit drugs production: future sources and threats', *Crime, Law and Social Change*, 27, 121-38.
- Narcotics Enforcement and Prevention Digest (1999) 'Columbian drug cartels exploit tech advantage', 25 November, 2.
- Pease, K. (1997) 'Predicting the future: the roles of routine activity and rational choice theory', in: G. Newman, R.V. Clarke and S. Shoham (Eds.), *Rational Choice and Situational Crime Prevention*, Aldershot: Dartmouth.
- Ramsey, M. and Partridge, S. (1999) *Drug Misuse Declared in 1998: Results from the British Crime Survey* (Home Office Research Study No. 197), London: Home Office.
- rec.drugs.cannabis
- rec.drugs.misc
- Remberg, B. (1997) 'Stimulant abuse: from amphetamine to ecstasy', in: United Nations *World Drug Report* (International Drug Control Programme), New York: Oxford University Press.
- Schneider, J.L. and Sutton, M. (1999) 'Keystroke crime: telling IT like IT is and the need for an Internet criminal activity survey', *Focus on Police Research and Development, Summer*, London: Home Office.
- Spinney, L. (1997) 'Net recipes blamed for boom in uppers', *New Scientist*, 152(2088), 28 June, 10.
- United Nations (1997a) *World Drug Report* (International Drug Control Programme), New York: Oxford University Press.
- United Nations (1997b) *Commission on Narcotic Drugs Acting as Preparatory Body for the Special Session of the General Assembly Devoted to the Fight Against the Illicit Production, Sale, Demand, Traffic and Distribution of Precursors used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances*, 7 November, Vienna: Economic and Social Council.
- United Nations (1999) 'Illicit drug traffic and supply, including reports of the subsidiary bodies of the Commission, and the impact of communication networks, such as the Internet, on the drug problem', Economic and Social Council, Commission in Narcotics Drugs, 42nd Session, Report of the Secretariat, March 16-25, Vienna.
- United Nations (2000a) 'Crime fighting on the Internet', *Update*, 12-13.
- United Nations (2000b) *World Drug Report* (International Drug Control Programme), New York: Oxford University Press.
- www.ftpmail.com
- www.iwf.org.uk
- www.landfield.com/usenet/news.announce.newsgroups/rec/rec.drugs
- Yoshida, T. (1997) 'Use and misuse of amphetamine: an international overview', in H. Klee (Ed.), *Amphetamine Misuse: International Perspectives on Current Trends*, Amsterdam: Harwood Academic.