
HEALTHY NIGHTCLUBS AND RECREATIONAL SUBSTANCE USE

*From a Harm Minimization to a Healthy
Settings Approach*

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The drug treatment program described in the previous article provides us with one example of a harm minimization. The following article describes a healthy settings approach. Both approaches recognize that criminalization is either an ineffective or insufficient means of control—if the goal of control is to safeguard the health of drug users and/or the public. Both approaches take a realistic perspective, recognizing that some people are going to use drugs come what may; but many of the associated risks of drug-taking can be reasonably reduced. The following article demonstrates how the health of drug users is compromised by many factors—beyond the biochemical effects of a given substance—that can be controlled without criminalization.

INTRODUCTION

In the UK alone, approximately 3.5 million individuals go to nightclubs each week (Mintel International Group, 2000). Most of these are younger people and a large proportion of them consume illegal drugs often in combination with alcohol (Measham, Aldridge, & Parker, 2001). The relationship between recreational drug use and dance music events is now well established (Release, 1997; Winstock, Griffiths, & Stewart, 2001). In the UK, for instance, estimates of ecstasy, amphetamine, and cocaine use in regular clubbers (i.e. attendees at nightclubs) or those travelling abroad to visit international nightclub resorts (e.g. Ibiza) far exceed average levels of consumption by individuals in the general population (Bellis, Hale, Bennett, Chaudry, & Kilfoyle, 2000) (Table 1).

The acute and long-term problems relating to recreational (i.e. ecstasy, amphetamine, and cocaine) drug use are the subject of a wide range of studies (Parrott, Milani Parmar, & Turner, 2001; Reneman et al., 2001) and form the rationale for a variety of health interventions (Niesnk, Nikken, Jansen, & Spruit, 2000; Page, 2000). Thus, ecstasy use has been linked to short-term health effects such as hyperthermia (Henry, Jeffreys, & Dawning, 1992) as well as long-term effects such as memory problems (Reneman et al., 2001). Interventions addressing recreational drug use have often been outreach based (Crew 2000, 2001) and focused on disseminating information on adverse effects of drugs and how to avoid them, problems around combining substances (often drugs and alcohol), and courses of action necessary when acute adverse effects are experienced. However, there is now a growing recognition that the adverse effects of club drugs are strongly related to the environment in which they are used rather than resulting solely from the toxic properties of substances themselves (Calafat et al., 2001). Often, reports of ecstasy-related deaths refer to the temperature of the environment: [t]he most likely cause of death is heatstroke. The temperature inside [a] club had reached 40° C [104° F] (Burke, 2001) or in other instances the lack of basic

Table 1 Levels of drug use in three UK surveys

	BRITISH CRIME SURVEY ^a (%)	IBIZA UNCOVERED SURVEY ^b (%)	DANCING ON DRUGS SURVEY ^c (%)
Cannabis	22	51	69.5
Ecstasy	5	39	51.4
Amphetamine	5	27	53.5
Cocaine	5	26	27.1

^a 16–29-year-olds in the general population; drugs used in last 12 months (Ramsay, Baker, Goulden, Sharp, & Sondhi, 2001).

^b 16–29-year-olds who visited Ibiza during Summer 2000; drugs used in last 6 months (Bellis et al., 2000).

^c 15–57-year-olds attending dance events; drugs used in last 3 months (Measham et al., 2000).

facilities to redress the effects of dancing and substance use (a number of people complained about lack of water—Bowcott, 2001).

In this paper, we argue that the relationship between the health effects of substance use and the environment in which they are used is much wider than temperature control and access to water and extends across the entire nightlife setting. We explore the wide range of factors that contribute to risk in nighttime environments and describe initiatives that effectively address these issues without curtailing fun. Consequently, we argue that by adopting a broad settings approach (World Health Organization, 1997) to nightclubs, inclusive solutions to reducing harm in clubs (including that caused by drugs) can be better developed and disseminated.

Furthermore, the same approach can also facilitate multidisciplinary involvement in nightlife health, taking health issues solely from health departments and placing the responsibility also in the hands of organizations such as local authorities, police, voluntary organizations, club owners and managers, door staff, and clubbers themselves. Finally, we suggest that with worldwide growth in dance music tourism, this multidisciplinary approach needs to be extended to include travel and tourism organizations and requires collaboration on an international level.

HEALTHY SETTINGS AND NIGHTCLUBS

A healthy settings approach (World Health Organization, 1997) recognizes that the effects of any particular setting on an individual's health are related to the general conditions within that setting, perhaps more than they are to provision of health or other care facilities. The nightclub setting at its most basic is a building that provides loud music, often with a repetitive beat, a dance area that usually has low background light and intermittent bright lighting effects and a licensed bar. Developing this environment as a healthy setting must recognize that large numbers of clubbers regularly consume substances such as alcohol, drugs, and tobacco (often in combination) and consequently experience a variety of psychological and physiological effects. Furthermore, the criminal nature of some drug use and environmental factors such as poor ventilation mean substance consumption can directly affect staff, for example, pressure of door staff to allow drugs into clubs (Morris, 1998) and passive smoking affecting bar staff, respectively (Jones, Love, Thomson, Green, & Howden-Chapman, 2001).

Some settings approaches to club health are well established. Harm minimization messages advising sipping water, avoiding mixing alcohol with ecstasy, and taking periods of rest provide the essential information for individuals to protect their health (London Drugs Policy Forum, 1996). However, without cool areas within the club, often referred to as chill out areas (London Drug Policy Forum, 1996) and access to free cold water, such advice

cannot be implemented. Equally, when adverse reactions to drugs are experienced, a separate appropriately stocked first-aid room, trained staff, and access [to] emergency services are all required to allow the best chance of recovery. However, other often more deleterious effects on health are also related to nightlife and substance use. In the UK in 1999, 19% of all violent acts ($n = 3,246,000$) occurred outside a pub or club. Overall, 40% of violent incidents were related to alcohol use and 18% to drugs (Kershaw et al., 2000). The paraphernalia of alcohol use also contributes to harm, with 5000 people being attacked with pint glasses every year of whom many are scarred for life (Deehan, 1999). Thus, both the promotion of aggression by, for instance, alcohol (Institute of Alcohol Studies, 2001) and the paraphernalia of substance use play parts in the harm caused by violence.

Less frequently addressed issues, which are important to a settings approach to club health, include the risk of smoking and in particular fire. Large amounts of electrical equipment, the use of old converted premises, low lighting, and a high proportion of smokers (Measham et al., 2001) all contribute to making nightclubs high-risk environments. Additionally, substance use can mean that patrons can be disorientated, leading to further implications particularly if an emergency evacuation of the building is required. A healthy setting should promote well-marked fire exits (some have been known to be camouflaged to fit in with club decor), crowd control training (Newcombe, 1994), and strict compliance with fire limits on the building's capacity (Ministry of Health, 1999). The effects of fires in clubs can be horrific, as graphically illustrated by the loss of life associated with recent incidents (*BBC News*, 2000; CNN, 2000; *The Guardian*, 2001). However, the effects of smoking alone may also be significant. Dancing while holding a cigarette can result in damage to eyes of those nearby (Luke, 1999), whilst nonsmoking bar staff are subject to heavy exposure to environmental tobacco smoke while at work (Jarvis, Foulds, & Feyerabend, 1992).

Noise levels in clubs can also pose a substantial risk to health. UK guidance on protection at work suggests earplugs are used when levels regularly exceed 90 dB (Health and Safety Executive, 1999). However, noise levels in many nightclubs reach 120 dB (Royal National Institute for Deaf People, 1999) and at some points noise can approach the pain threshold (140 dB) (Walsh, 2000). However, those utilizing the nighttime environment are unlikely to recognize the effects on their hearing. The clubbing experience, especially in conjunction with substance use, distracts from concerns about health effects and in the case of some drugs (e.g. ketamine or cocaine) may even anaesthetize the user against pain (European Monitoring Center for Drugs and Drug Addiction, 2000). As increasing numbers of young people are exposed to loud music in dance clubs, it would be expected that more young people would develop hearing problems. In fact, a survey by the Medical Research Council Institute of Hearing Research found that 66% of club goers reported temporary hearing problems after attending a nightclub (Smith & Davis, 1999). Policies about maximum noise levels in clubs can address some of these

issues. However, noise is not just a concern within the club but may also affect the surrounding environment, either through loud music contaminating nearby residential areas or through the noise of inebriated clubbers appearing on the street when clubs finally close (BBC Devon, 2001). Such noise may also be associated with violence (often related to alcohol and drug use), lack of appropriate access to public transport (leaving long waits or drink/drug driving as the only alternatives), and difficulties in coordinating an adequate police presence when clubs close (Calafat et al., 2001).

Furthermore, any comprehensive approach to a healthy club setting should recognize the close relationship between substance use and sexual health. A variety of studies identify the relaxation of safe sex measures (particularly condom use) associated with alcohol and drug-taking (e.g. Poulin & Graham, 2001). One study has identified individuals using drugs, particularly GHB, specifically in order to temporarily forget safe sex messages they have previously heard (Clark, Cook, Syed, Ashton, & Bellis, 2001). Addressing such issues means providing safe sex information within the club setting and combining this with easy access to condoms. Fire, noise, sex, and other areas for health promotion and protection in the nighttime environment as well as their relationship with substance use are summarized in Table 2.

DISSEMINATING KNOWLEDGE AND DEVELOPING SOLUTIONS

The use of substances often contributes to the dangers presented within the nighttime environment. Previously, harm minimization has tended to focus on direct effects of drug use. However, basic measures to alter the environment can substantially reduce substance-related harm. Measures to reduce violence in and around clubs include training and registration of door staff, good lighting around the main entrance, and public transport integrated into the nighttime environment so that individuals can quickly and easily leave city centers (London Drug Policy Forum, 1996; Calafat et al., 2001). Specific measures to reduce spillage of bottles from bars and clubs onto streets can also reduce the risk of glass-related injuries (The Kirklees Partnership, 1999). Inside, club design should anticipate and acknowledge the exuberant behavior and intoxicated state of patrons by restricting access to any areas where falls are likely and ensuring exits are well lit and distinctive (London Drug Policy Forum, 1996).

Importantly, the process of tackling harm reduction across the entire nightlife setting legitimizes the inclusion of a wide variety of organizations and individuals who may have felt that they could not engage in dialogue solely on a drug use agenda. These groups may include club and bar owners, club goers and club staff, event promoters, local authorities and politicians,

Table 2 Some wider club health issues, their relationship with substance use, and developing a setting response

HEALTH RISK	RELATIONSHIP TO SUBSTANCE USE	SETTING RESPONSE	GROUPS INVOLVED
Dehydration and hyperthermia	Ecstasy alters thermoregulation (McCann, Slate, & Ricaurte, 1996) Increased energetic dancing Alcohol consumption causes dehydration	Prevent overcrowding Well ventilation and temperature control Cool and quieter <i>chill out</i> areas or ability to leave and reenter Access to cool, free water Information on effects of taking drugs Pill testing First-aid room and staff training	Club owners/staff Drug outreach workers Health promotion groups Licensing authority Club goers Local A&E
Fire	High levels of smoking among club goers Intoxication leads to disorientation when exiting clubs Flammable clubbing clothes (e.g. PVC)	Prevent overcrowding High visibility and accessible emergency exits Availability and maintenance of all fire equipment Ensure electrical equipment is safe Encourage use of noncombustible material	Club owners/staff Fire authorities Building inspectors Licensing authority Club goers
Damage to hearing	Alcohol and drugs reduce awareness of potential hearing damage Greater exposure to noise due to prolonged dancing	Set maximum levels on systems Restricted areas around speakers Make earplugs available Information on the effects of excessive noise Information on signs of hearing damage	Club owners/staff Club goers Environmental inspectors Licensing authority Health promotion Club goers
STIs and unwanted pregnancies	Alcohol and drugs reduce inhibitions (Calafat, 2001) Substances help forget safe sex message (Clark et al., 2001)	Easy availability of condoms Information on safer sex	Health promotion groups Public health department Contraception services Club owners Club goers

Accident	Disorientation	Toughened glass or plastic bottles	Club owners/staff
Glass	Anaesthetising effect of substances	No drinking/smoking on dance floor	Public health departments
Burns	(European Monitoring Centre for Drugs and Drug Addiction, 2000)	Provide places to dispose of cigarettes	Health promotion groups
Falls	Lack of fear and increased confidence	Well-lit and clear stairwells	Licensing authority
General	Increased risk-taking	Restricted access to potentially dangerous areas	Club goers
		Secure fixtures and fittings are secure	
		On-site first-aid	
Violence	Alcohol and drugs increase aggression	Stagger closing times	Club owners/staff
	Drug dealing (Morris, 1998)	Increase public transport availability throughout night	Police
	Steroid and cocaine use by door staff (Lenehan & McVeigh, 1998)	Plastic/toughened glass	Licensing authority
	Increased risk-taking, lower inhibitions	Registration and training of door staff	Club goers
		Complaints procedures and Policing	Transport authority
Drink/drug driving	Increased confidence	Provide cheap soft drinks	Club owners/staff
	Lack of coordination	Public transport: taxis, buses, and trains available	Health promotion group
	Increased risk-taking, lower inhibitions (Crowley & Courtney, 2000)	Information of safety issues	Club goers
		Special club buses provided by clubs	Police
			Transport authority
Passive smoking	Increased smoking when out	Adequate ventilation (especially behind the bar)	Club owners
	Many "occasional" smokers	Adequate "break areas" for staff	Outreach workers
	Link between smoking and other substance use	No smoking areas	Smoking prevention groups
	(Lewinsohn, Rohde, & Brown, 1999)	Information on dangers of smoking	Health promotion groups
			Licensing authority
			Club goers

environmental health officials, and travel and tour operators as well as youth services, health services, police, and other emergency services. Furthermore, sometimes, this mix of individuals produces novel solutions. For example, to reduce night crime and increase public safety, the owners of a number of neighboring venues have supported the employment of a uniformed police officer dedicated to patrolling outside their premises (Greater Manchester Police, 2001). Also, in North Devon, a police initiative involved handing out free lollipops as clubbers left nightclubs in order to reduce noise in the surrounding areas (BBC Devon, 2001).

INTERNATIONAL CONSIDERATIONS

The recent clubbing phenomenon probably has its roots in Ibiza where the mix of music (known as the Balearic Beat) and concurrent use of ecstasy rose to popularity (Calafat et al., 1998). Today, traveling in the form of dance music tourism (individuals specifically traveling abroad to attend dance events or choosing to holiday in destinations renowned for their nightlife) is more popular than ever. Major international clubbing resorts include Ibiza in Spain, Rimini in Italy, and Ayia Napa in Cyprus. Clubbing has additional elements of risk when undertaken in an unfamiliar country. Thus, geography abroad is often unfamiliar, and combined with a different language, this can mean health services or other forms of help are difficult to locate and access. Furthermore, accessing items such as condoms or emergency contraception may also prove more difficult. Legislation can be different and poorly understood, leading to unexpected confrontations with judicial services. If drugs are purchased, the supplier will often be untested, raising the possibility of counterfeits. Equally, alcohol measures may vary in size and purity from standard measures within individuals' home countries. When alcohol and drugs are consumed, a combination of hotter climates, longer periods of dancing, and possible gastrointestinal infections increase the risk of severe dehydration. Importantly, however, along with environmental change, individuals abroad are often free from the social constraints of work and family that restrict their substance use and sexual behavior (Ryan and Kinder, 1996). Thus, an individual may go clubbing one night per week while at home, whereas during a 2-week trip abroad the same individual may visit a club every night. This in turn can significantly alter an individual's exposure to substances. For instance, around a third of all young people from the UK who visited Ibiza in 1999 used ecstasy while on the island. The vast majority of these also used ecstasy in the UK (Bellis et al., 2000). However, the way in which people used ecstasy while abroad was significantly different. Of ecstasy users, only 3% used the drug 5 or more days a week in the UK while 45% of the same group used the drug 5 or more days a week while in Ibiza. Similar trends in increased frequency of use were also seen for alcohol, amphetamine, and cocaine.

Little is currently known about the health effects of such periods of intense substance use. Clearly, the opportunities for adverse reactions are substantially increased where multiple drugs are being regularly consumed along with alcohol on a nightly basis. Furthermore, intense periods of consumption provide at least the possibility that more frequent drug use could continue when individuals return home, potentially moving individuals' habits further towards problematic use.

In order to address the health needs of the increasingly large numbers of young people who regularly travel to experience international nightlife, new approaches to health promotion and protection are required. New literature and campaigns are needed that provide international information on substance use and nightlife health for those traveling abroad. They should tackle the broad range of risks to health, including environmental considerations, but should also address the changes in substance use that occur while abroad (Bellis et al., 2000). Access to such information can utilize new technologies affiliated with club culture (e.g. the Internet) and popular with the major clubbing age groups (Hughes & Bellis, *in press*). Good examples of such sites are already available (www.dancesafe.org and www.ravesafe.org).

CONCLUSIONS

Around the world, clubbing is now well established as a major feature of the nighttime environment. It provides a social outlet for millions of individuals every week and developing a popular club scene has reinvigorated many cities, bringing money and employment. Substance use in clubs is strongly affiliated with relaxation, exercise (Gaule, Dugdill, Peiser, & Guppy, 2001), and meeting new sexual partners. Whether these pastimes lead to increased well-being or ill health depends on the environment and the specific behavior of individuals. Developing clubs as a healthy setting requires interventions that protect and promote health while retaining fun as a central feature. Where interventions or regulations substantially reduce fun, young people may look elsewhere for their entertainment (e.g. illegal parties). Consequently, organizations need to recognize the importance of involving young people in the development of nighttime health interventions.

Substance use is one of the major risks to health in the nighttime environment both through its direct effects on individuals' health and through the alterations in behavior and perception that it causes. However, many organizations and individuals do not feel either comfortable or equipped to engage in drug-specific interventions or even discussions. By developing a healthy settings approach to clubs, the emphasis of health interventions can be diverted away from solely drug use to include a wider range of issues. This means key individuals and organizations (including club owners, staff, promoters, and major industries) can be engaged in a harm minimization agenda that includes drug use along with alcohol, tobacco, transport,

security, and other environmental issues. Furthermore, tackling a broad range of issues in the nighttime environment reaches groups that are difficult to reach through education or occupational settings, such as those who play truant or are unemployed.

Some countries have already engaged in this more holistic approach to nighttime health by generating broader guidelines on safer clubs and clubbing (e.g. London Drug Policy Forum, 1996; Ministry of Health, 1999; Newcombe, 1994). However, with cheaper air travel and young people having greater expendable income (Calafat et al., 2001) combined with the international nature of the clubbing phenomenon, a significant proportion of an individual's annual clubbing nights can be spent in nightclubs abroad where risks to health may be even greater. As a result, guidelines are required to provide basic standards for nightclubs on an international basis and different interventions need to be developed to address local and international needs. Efforts to develop international guidelines on club health are already underway (www.clubhealth.org.uk). However, empirical evidence on changes in individuals' behavior when abroad (Bellis et al., 2001) and the resultant effects on health are both rare and urgently needed. Without such intelligence, the appropriate structure of health interventions to minimize harm for millions of dance music tourists remains unclear and the burden of ill health carried especially by younger people may unnecessarily be increasing.

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