

Ibiza uncovered: changes in substance use and sexual behaviour amongst young people visiting an international night-life resort

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Abstract

Background: Each year more young people travel to international resorts where levels of substance use, sex and associated health risks are unknown. This study measures changes in levels of substance use and sexual behaviour of young people from the UK when on holiday in a youth orientated international resort, Ibiza. **Methods:** Data were collected through a cross-sectional survey collecting matched information on individuals' behaviour in the UK and abroad. Questionnaires were administered to 846 individuals aged between 15 and 35 at Ibiza Airport prior to their returning to the UK. **Results:** Young visitors to Ibiza significantly alter patterns of drug, alcohol and tobacco use. For ecstasy, in the UK 2.9% of users (9/313) used 5 or more days a week, while in Ibiza this rises to 42.6% (127/298). Fewer individuals use amphetamine, ketamine, cannabis, LSD, cocaine and GHB (γ -hydroxybutyrate) in Ibiza although those continuing to use in Ibiza consume at substantially higher rates than when in the UK ($P < 0.001$). Using multiple drugs over a 1 or 2 week stay was common (31.9%). Most individuals (53.8%) had sex while in Ibiza; 26.2% had sex without a condom and 23.2% had more than one sexual partner. Overall, 7.3% of individuals went to hospital or to see a doctor while in Ibiza with male ($P < 0.001$), older ($P < 0.05$) and staying for shorter times ($P < 0.005$) being the key risk factors. **Conclusions:** While the potential for substance related ill health is dramatically elevated in Ibiza, harm minimisation measures in such resorts remain scarce. Equally, although holiday companies attract a sexually active cohort, safe sex messages are either absent or ineffective. Coordinated information campaigns to protect the health of young people are urgently needed and will require European cooperation across both public and private organisations. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

Recent surveys of young people in the UK confirm excessive use of alcohol even in those under 18 (Hughes et al., 1997; ONS, 1998), describe an inability to reduce levels of smoking (Government Statistical Service, 1998) and identify rising levels of drug use (Ramsey and Partridge, 1999). This dramatic rise means that, along with high levels of drinking and tobacco use, over half of 16–24 year olds have now also tried an illegal substance (although regular users represent a smaller proportion; Aldridge et al., 1999; Ramsey and Partridge, 1999). Amongst other factors, regular use of substances such as ecstasy, cocaine and amphetamine has been associated with attendance at night-time social venues and recently, more specifically night clubs (Forsyth et al., 1997; Kilfoyle and Bellis, 1998; Calafat et al., 1999).

The recent growth of the clubbing phenomenon in the UK (Garratt, 1998) means that each week vast numbers of individuals, many using recreational drugs (Bean et al., 1997), attend late night dance venues and each summer a proportion of these seek holiday resorts abroad offering similar dance and social opportunities (Sellars, 1998). Currently, little is known about the substance use or sexual behaviour of young people on such packages even though drugs or sex abroad may carry disproportionate risks to health. For instance, drug supplies abroad may be less reliable increasing the dangers from consuming unexpected substances (Sherlock et al., 1999); hotter climates along with risk of gastro-intestinal infections increase the risk of dehydration (Department of Health, 1995) (especially in conjunction with drugs such as ecstasy, 3,4-methylenedioxymethamphetamine; McCann et al., 1996; Baker et al., 1997) and a holiday binge mentality (Smeaton et al., 1998) may lead to consump-

tion of all things in excess (Josiam et al., 1998). Furthermore, basic protective measures such as condoms may not be as easily available (Carter, 1997) to protect from unwanted pregnancy or higher levels of HIV should opportunistic sex occur (Thomas et al., 1997). Unlike major clubs in the UK, some venues abroad often do not have or even know of safer dancing codes (Newcombe, 1994; London Drug Policy Forum, 1996) with water from club bars commanding prohibitive prices, harm minimisation literature rare and peer intervention groups or first aiders seldom available. Finally, when emergencies occur, health and judicial systems are often already stretched to breaking point as resorts with only small indigenous populations try to accommodate millions.

Paradoxically within such foreign settings, young peoples' risk taking is likely to increase as individuals escape the social constraints of family and workplace (Ryan and Kinder, 1996; Carter, 1997; Carter et al., 1997). For some groups on holiday, increased consumption of alcohol (Josiam et al., 1998) and unsafe sexual behaviour (Gillies et al., 1992; Carter et al., 1997; Thomas et al., 1997) has already been documented. However, to date no studies have described the substance use and sexual behaviour of young people when visiting night-life orientated resorts abroad. Therefore, the following study aims to measure changes in those risk behaviours when young people from the UK takes annual holidays in such resorts elsewhere in Europe.

Amongst such resorts arguably the most popular in Europe for night clubs is Ibiza. This Balearic island benefits from a long association with club music and recreational drug use, especially ecstasy (Calafat et al., 1998). In 1986 ecstasy was effectively launched from Ibiza as a popular dance drug described as the perfect accompaniment to a new style of music dubbed 'Balearic beat'

(Calafat et al., 1998). Since then the popularity of Ibiza has grown, helped by the advent of cheap international airfares and packaged holidays aimed specifically at the youth market. As a result between January and September 1999, Ibiza attracted around 700 000 tourists from the UK alone and an island with an endemic population of 80 000 played host to more than one and a half million tourists (Fomento del Turismo de Ibiza, 1999). Consequently, Ibiza was chosen as the most appropriate setting for this survey.

2. Methods

A short, anonymous questionnaire was developed to measure basic demographic variables, use of alcohol, tobacco and seven types of drug while in Ibiza (amphetamine; ketamine; cannabis; ecstasy; LSD; cocaine; GHB) and usual patterns of use over the previous 6 months in the UK. In addition, participants were asked about their sexual behaviour in Ibiza and the UK, their contact with health services while on the island and, the duration and motivation for their current visit. Finally, individuals were asked whether they had come across any drug-related health information during their stay.

To capture details of individuals' behaviour throughout their stay, questionnaires were administered in the departure areas of Ibiza airport to young people (maximum age 35) waiting to check in for flights back to the UK. Potential respondents were first asked if they had time to complete a short questionnaire ($n = 1076$). Those with time ($n = 901$, 83.7% of those approached) had the subject and details of the survey explained and were then handed a questionnaire. Although 870 questionnaires (96.6% of those distributed) were returned only 846 (93.8% of those distributed) were completed unspoiled and by

individuals within the age range. Distribution of questionnaires began on 8th July 1999 and finished on 2nd September 1999. All questionnaires were returned to England for entry onto a dedicated database for subsequent analysis using SPSS (SPSS, 1996). Throughout the analyses non-parametric statistics were used when data were not normally distributed and logistic regression analyses where interrelationships between variables would otherwise confound results.

3. Results

In total, 456 males and 390 females returned completed questionnaires. The vast majority of these individuals had been resident for either 1 (50.4%) or 2 weeks (44.5%) in San Antonio (92.3%), the islands' largest resort. Ages ranged from 15 to 35 with a median age of 20 (males 20 years; females 19 years). Individuals' motivation for choosing Ibiza included primarily the music scene (78.0%) and the weather (49.6%) with fewer individuals being attracted by sex (23.6%), drugs (17.2%) or work (1.7%). Males chose sex as a reason for visiting more often than females (males 33.6%, females 11.9%, $\chi^2 = 54.2$, $P = 0.001$). No other selection factors differed significantly between males and females. For 53.0% of individuals this was their first visit to Ibiza. Those returning to the island for further visits were marginally more likely to identify drugs as a reason for visiting (first visit 14.3%, subsequent visits 20.3% $\chi^2_{\text{(for a trend)}} = 5.211$, $P < 0.05$).

3.1. Substance use

The percentages of individuals using each substance in Ibiza and over the previous 6 months (in the UK) are given in Table 1 along with statistical comparisons between

Table 1

Substances used by individuals while holidaying in Ibiza and over the prior 6 months in the UK

Substance	<i>n</i>	Percentage using in			McNemar <i>P</i>	
		Neither	UK only	Ibiza only	Both	
Alcohol	842	1.2	0.7	0.6	97.5	1
Tobacco	842	36.8	3.4	4.6	55.1	0.275
Amphetamine	842	68.4	17.7	2.3	11.6	<0.001
Ketamine	842	90.5	4.5	1.8	3.2	<0.005
Cannabis	842	49.8	15.2	1.9	33.1	<0.001
Ecstasy	842	59.5	5.2	3.3	31.9	0.076
LSD	841	87.5	9.0	0.7	2.7	<0.001
Cocaine	842	77.0	8.1	2.0	12.9	<0.001
GHB	842	96.0	2.5	0.7	0.8	<0.01

Table 2

Comparative frequency of substance use in UK and Ibiza^a

Substance	Location	<1 day a week (%)	1 day a week (%)	2–4 days a week (%)	≥5 days a week (%)	χ^2 (trend) <i>P</i> value
Alcohol	UK	6.5	16.2	52.5	24.8	482.5
	Ibiza	1.1	2.4	9.1	87.4	<0.001
Tobacco	UK	12.8	5.3	8.7	73.2	24.48
	Ibiza	3.6	5.3	7.5	83.6	<0.001
Amphetamine	UK	79.8	13.8	4.5	2.0	138.9
	Ibiza	18.8	23.9	32.5	24.8	<0.001
Ketamine	UK	81.5	12.3	1.5	4.6	39.9
	Ibiza	14.3	33.3	26.2	26.2	<0.001
Cannabis	UK	40.3	8.6	21.9	29.2	80.7
	Ibiza	8.8	11.5	25.8	53.9	<0.001
Ecstasy	UK	60.7	25.2	11.2	2.9	260.7
	Ibiza	10.4	11.7	35.2	42.6	<0.001
LSD	UK	90.9	5.1	3.0	1.0	56.3
	Ibiza	27.6	10.3	31.0	31.0	<0.001
Cocaine	UK	78.0	9.6	5.6	6.8	90.3
	Ibiza	14.2	30.7	33.9	21.3	<0.001
GHB	UK	78.6	3.6	10.7	7.1	13.3
	Ibiza	7.7	30.8	23.1	38.5	<0.001

^a Data for all individuals who used at one or both locations.

Table 3
Frequency and change in frequency of substance use for individuals who used each substance in both Ibiza and the UK

Substance	N	Median frequency of use		% using 5 or more days a week		% Increasing use in Ibiza		% Decreasing use in Ibiza		Wilcoxon P*
		UK	Ibiza	UK	Ibiza	UK	Ibiza	Ibiza		
Alcohol	821	2–4	≥ 5	24.7	87.3	68.2	1.7			<0.001
Tobacco	464	≥ 5	≥ 5	76.3	87.3	19.2	1.7			<0.001
Amphetamine	98	1	2–4	4.1	26.5	29.6	0.0			<0.001
Ketamine	27	1	2–4	7.4	29.6	74.1	0.0			<0.001
Cannabis	279	2–4	≥ 5	39.4	55.6	42.3	11.5			<0.001
Ecstasy	269	<1	2–4	3.0	45.0	84.4	1.9			<0.001
LSD	23	<1	2–4	0.0	30.4	69.6	0.0			<0.001
Cocaine	109	<1	2–4	7.3	22.0	71.6	4.6			<0.001
GHB	7	1	2–4	14.3	14.3	71.4	0.0			<0.05

* Statistic identifies significant increases in individuals' frequency of substance use when visiting Ibiza.

frequency of substance use in both locations. Individuals were less likely to have used most substances during their stay in Ibiza than over the previous 6 months in the UK. Exceptions to this were alcohol, tobacco and ecstasy where proportions of individuals using at all in Ibiza did not differ significantly from the last 6 months in the UK. While the number of individuals using most substances fell (Table 1), when used, the frequency of use for all substances was significantly higher in Ibiza than in the UK (Table 2). Thus, while only 2.9% of ecstasy users in the UK used five or more times a week, in Ibiza 42.6% of those who used ecstasy did so five or more times a week. Similar significant rises in frequency of use were seen for all drugs. To examine whether this was the result of changes in individuals' behaviour (rather than simply a different subset of heavier user taking substances in Ibiza) for each substance, analyses were limited to those who used in both locations (Table 3). For all substances increases in frequency of use in Ibiza remained significant with, for instance, those who used amphetamine 5 or more days a week rising from 4.1% in the UK to 26.5%

in Ibiza and for ecstasy the equivalent rise was from 3.0 to 45.0% (Table 3). The number of ecstasy tablets taken on a usual night did not differ significantly between locations (Ibiza median = 2; UK median = 2; $Z = 0.421$, $P = 0.673$). Despite these levels of drug use only around a third (37.5%) of individuals saw any health information on drugs during their visit.

3.2. Sexual behaviour

Most (84%) of those visiting Ibiza reported having had at least one sexual partner in the previous 6 months (UK) while 53.8% claimed to have had at least one sexual partner while in Ibiza. There was no significant difference between sexes in the number claiming at least one partner in the UK ($\chi^2 = 0.02$, $P = 0.883$). However, males were more likely than females to claim to have had at least one partner in Ibiza (males 57.6%, females 49.5%, $\chi^2 = 5.418$, $P < 0.05$). Using logistic regression analysis the effects of gender disappear and instead, number of partners in the UK (last 6 months) and length of stay in Ibiza are the only two factors significantly, positively associated with

Table 4
Sexual partners in Ibiza stratified by number in the UK

Partners in Ibiza	Partners in UK (last 6 months)				Total
	0	1	2–5	≥6	
<i>(a) Number of individuals</i>					
0	93	178	102	8	381
1	23	153	71	5	252
2–5	11	35	73	17	136
≥6	4	11	13	27	55
Total	131	377	259	57	824
<i>(b) Percentage in each category having sex in Ibiza at least once without a condom</i>					
0	0.0	0.0	0.0	0.0	0.0
1	26.1	62.1	42.3	40.0	52.8
2–5	9.1	37.1	39.7	23.5	34.6
≥6	75.0	54.5	61.5	70.4	65.5
Total	7.6	30.2	25.9	43.9	26.2

having sex in Ibiza (UK partners $P < 0.001$, days in Ibiza $P < 0.005$). No patterns of substance use were significantly associated with having sex in Ibiza. Table 4a shows the number of sexual partners study participants reported in the UK and Ibiza. Number of partners in the UK (last 6 months) also correlated significantly with number in Ibiza ($r_{\text{Spearman}} = 0.336$, $P < 0.001$). Again, although different sexes claimed different numbers of partners in Ibiza ($Z = 3.78$, $P < 0.001$), using logistic regression the effect disappeared when controlled for sexual activity in the UK. Over a quarter of all respondents (26.2%, see Table 4b) had sex without using a condom at least once while in Ibiza. Amongst those having sex in Ibiza, unprotected sex was positively associated with being male ($P < 0.05$) and the number of sexual partners individuals had in Ibiza ($P < 0.05$, logistic regression analysis and see Table 4b). Again no patterns of substance use in Ibiza were significantly related to having sex without condoms.

Finally, 7.3% of individuals had to go to hospital or see a doctor while in Ibiza. This study did not ask the reason for such visits. However, logistic regression analysis revealed that those who were male ($P < 0.001$), older ($P < 0.05$) and staying for shorter times ($P < 0.005$) were more likely to have sought such medical attention.

4. Discussion

Results from this study indicate that young people's patterns of drug use differ substantially on holiday abroad from their usual patterns in the UK (Tables 1–3). Currently, less individuals use amphetamine, ketamine, cannabis, LSD, cocaine and GHB on a typical holiday in Ibiza than have used at all in the last 6 months at home. This could repre-

sent a choice to avoid certain substances abroad. However, the drug markets in Ibiza may still be relatively undeveloped (Hopkins, 1999) and use of less common drugs still be limited by supply. There appears to be no reduction in numbers using more established drugs such as alcohol, tobacco and ecstasy (Table 1). Furthermore when individuals manage to obtain drugs (presumably through smuggling them onto the island or purchasing them in Ibiza), the frequency of use increases dramatically. Thus, ecstasy use in Ibiza was characterised by a 15-fold increase in the proportion of users using five or more times per week. In fact, frequency of consumption increased for all drugs with, for instance, amphetamine users in Ibiza being 12 times more likely to use five or more times a week than users in the UK (Table 2). Even when comparisons for each drug are limited to individuals using in both countries (Table 3), the median frequency of use rises significantly for all drugs and for ecstasy rises from less than one time per week in the UK to two to four times per week in Ibiza (Table 3).

The quantities of ecstasy taken on each day using did not differ in Ibiza from the UK with an average (median) of two tablets being taken per day in both places. However, while in the UK this would represent only 2.9% of users (Table 2) taking ten or more tablets per week, in Ibiza over 40% of those continuing to take ecstasy took ten or more tablets per week sometimes for a 2 week period. Moreover, 31.9% of individuals visiting the island used more than one drug (excluding alcohol and tobacco) during their stay. Of those using ecstasy for instance, nearly a third (32.2%) also used amphetamine and virtually all drank alcohol (97.3%). The potential toxicological effects of such frequent and mixed substance use, even for short periods of 1 or 2 weeks, remain largely unstudied. Furthermore, much sold as, for instance, ecstasy may

actually contain other substances (Sherlock et al., 1999). This represents an additional risk as individuals experience different cocktails of unknown compounds with unexpected effects. Despite these dangers, only around one third of respondents received any health related information on drugs during their stay and consequently many may be ignorant of the potential health risks or what course of action to take in an emergency abroad.

While this study, unlike others (Graves, 1995; Josiam et al., 1998), found no link between patterns of substance use and sexual behaviour, even on their own rates of unprotected sex in Ibiza are disturbing. Although only 23.6% of people indicated that they were attracted to the island for sex, over half actually had sex while in Ibiza and 48.4% of these had sex without a condom with at least one person (Table 4a,b). Although, for some individuals this may have been their long term partner on holiday with them, for many including those with multiple sexual partners in Ibiza (23.2% of respondents, Table 4a) these represent new sexual contacts.

Often holiday packages to resorts such as Ibiza trade on images of long nights with high levels of alcohol consumption and the potential for new sexual partners. For instance, Club 18–30, one of the most successful youth tour operators, includes in its mission statement ‘try sex in the surf ... drink all your duty free on day one’ (Club 18–30, 1999). Elements of significant sexual activity and increased alcohol use are confirmed by this study but in association with a significant rise in recreational drug use. The ability for such resorts to control drug dealing is limited and with many recreational users currently visiting Ibiza but not using drugs (Table 1) there remains considerable potential for drug markets and drug use to grow in future years. In the short term, harm minimisation measures such as educational leaflets (Health Ed-

ucation Authority, 1999; HIT & LJMU, 1999), information on seeking medical assistance abroad and easy access to condoms seem essential steps in protecting the health of young holiday makers. Such educational materials and advice should reflect the changes, as identified here, in substance use associated with what has been branded the ‘dance music tourism experience’ (Sellars, 1998). Materials and messages developed for use abroad need to include advice on frequent drug use, the risks of poly-drug use and counterfeit drugs, increased risks of dehydration, access to health protection measures such as condoms and difficulties of access to medical services. At least in part, the responsibility for distribution of such materials should lie with the tourist companies, airlines, hotels and clubs and other venues which have the greatest opportunity to help protect the health of their clients (McKee, 1996). Moreover, the endorsement of such materials by popular youth venues and brand names should improve the appeal of health messages and use of protective measures such as condoms (Bellis and Ashton, 2000).

Already holidays in Ibiza and other such night club resorts around Europe have been booked by young people for the year 2000. Currently, the long term health costs of even small, regular doses of drugs such as ecstasy remain uncertain (Green and Goodwin, 1996; Jansen, 1999; McCann et al., 1999) and any long term effects of the short but intensive bouts of substance use identified in this paper (Tables 2 and 3) will remain speculative for some time. Equally, although this research identifies significant changes in young people’s substance use when abroad, further research is urgently needed to examine any long term changes in substance use behaviour that may persist after individuals return to the UK. In the mean time however, the opportunity exists to ensure that sensible pre-

cautionary measures are available allowing individuals who choose to protect their health on such holidays the information with which to do so along with the appropriate materials (e.g. condoms, cheap water, etc). Such initiatives will help minimise the immediate risks from acute drug related incidents, reduce their health impact should they occur and at least encourage safe sex. These measures however, will require not only cooperation between public health bodies in different European countries but a greater level of collaboration with the commercial bodies operating in dance music tourism.

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