Knowledge and experience of young people regarding drug abuse, 1969-89

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Br Med J 1990;300:99-103

Abstract

Objective—To establish a baseline of knowledge to plan an effective health education programme in schools. The survey was repeated at five year intervals from 1969 to 1989.

Design—To preserve consistency, the same anonymous questionnaire, which was confidential to the research workers, was used throughout.

Setting—Three secondary schools in Wolverhampton in different parts of the town and representing different social groups.

Subjects—Sample sizes ranged from 471 fourth year pupils (aged 14 to 15) in 1969 to 540 in 1984 and 380 in 1989, the decrease being due mainly to the falling birth rate. There were slightly more girls than boys, and the pupils covered the whole range of academic ability.

Results—Over the 20 years the proportion of pupils who knew someone taking drugs more than doubled from 15% (71) to 31% (117) and the proportion who had been offered drugs almost quadrupled from 5% (24) to 19% (72). The changes taking place over the past five years were characterised by an increased knowledge about drugs and the first mention of "crack," a purified form of cocaine, and "ecstasy" (methylenedioxymethamphetamine). Peer influence continued to be given as the prime reason for taking drugs. Over the 20 years, though less often mentioned in 1989, television and newspapers remained the most common source of information.

Conclusions—These results suggest the need for responsible coverage by the mass media and for more effective health and social education programmes to prevent the spread of drug misuse.

TABLE 1—Knowledge of dangers and methods of taking drugs cited by young people. * Figures are numbers (percentage) of pupils who cited drug in answer to first question (see appendix)

	Cannabis	Opiates	Lysergide	Cocaine	Solvents	Amphetamines
<i>Dangers</i>						
Can kill						
1969	60 (14)	90 (23)	42 (12)			25 (13)
1974	64 (17)	80 (25)	27 (12)	5 (6)		5 (8)
1979	81 (18)	171 (35)	54 (28)	67 (22)	13 (26)	6 (13)
1984	80 (20)	124 (32)	4 (9)	77 (25)	20 (19)	1 (10)
1989	90 (30)†	171 (52)†	34 (24)†	143 (48)†	22 (35)†	8 (21)
95% Confidence interval‡	4 to 17	13 to 27	5 to 27	15 to 29	2 to 30	
Can cause mental illness and hallucinations						
1969	42 (10)	31 (8)	73 (21)			5 (3)
1974	59 (16)	48 (15)	50 (23)	6 (7)		8 (12)
1979	44 (10)	36 (7)	36 (19)	15 (5)	6 (12)	8 (17)
1984	24 (6)	20 (5)	10 (21)	20 (7)	6 (6)	2 (20)
1989	10 (3)	7 (2)	30 (22)	9 (3)	9 (14)	6 (15)
Can cause addiction and dependence						
1969		25 (6)	7 (2)			4 (2)
1974	47 (12)	53 (17)	19 (9)	7 (8)		5 (8)
1979	31 (7)	57 (12)	5 (3)	14 (5)		0 (0)
1984	44 (11)	62 (16)	9 (19)	36 (12)	6 (6)	0 (0)
1989	52 (17)‡	79 (24)†	18 (13)	73 (24)†	5 (8)	4 (10)
95% Confidence interval‡	1 to 12	2 to 14		6 to 19		
Can cause drowsiness, coma, and dreaminess						
1969	17 (4)	12 (3)	10 (3)			4 (2)
1974	52 (14)	28 (9)	16 (7)	10 (12)		7 (11)
1979	56 (12)	49 (10)	12 (6)	25 (8)	5 (10)	4 (9)
1984	67 (17)	46 (12)	3 (6)	31 (10)	15 (14)	4 (40)
1989	35 (12)	17 (5)†	9 (6)	20 (7)	6 (10)	2 (5)‡
95% Confidence interval‡		-11 to -3				-66 to -4
Can give you AIDS						
1989	8 (3)	46 (14)	4 (3)	21 (7)		
Screws you up						
1989	2 (1)	8 (2)	1 (1)	2 (1)		
<i>Knowledge of correct method of taking drug</i>						
1969	325 (76)	188 (48)	154 (44)			175 (89)
1974	309 (81)	207 (66)	83 (38)	47 (55)		52 (80)
1979	368 (82)	392 (79)	61 (32)	169 (57)	9 (18)	37 (80)
1984	329 (82)	305 (78)	26 (55)	149 (49)	82 (79)	9 (90)
1989	249 (83)	277 (84)‡	83 (60)	152 (51)	47 (75)	18 (46)†
95% Confidence interval‡		0 to 12				-68 to -20

*Numbers (percentage) responding to question on dangers of drugs: 1969, 238/471 (51); 1974, 331/523 (63); 1979, 519/648 (80); 1984, 387/540 (72); and 1989, 326/380 (86). Numbers (percentage) responding on how drugs are taken: 1969, 439/471 (93); 1974, 437/523 (84); 1979, 597/648 (92); 1984, 509/540 (94); and 1989, 362/380 (95).

†Change between 1984 and 1989 significant at $p < 0.01$.

‡Change between 1984 and 1989 significant at $p < 0.05$.

§For change in percentage between 1984 and 1989.

Introduction

In recent years intravenous drug misuse has become a major source of transmission of AIDS. In its report *AIDS and Drugs Misuse* the Advisory Council on the Misuse of Drugs stated that, "Prevention of drug misuse is now more important than ever before and in the longer run the success or failure of efforts to prevent young people from embarking on a career of drug misuse will have a major effect on our ability to contain the spread of HIV."¹

In Wolverhampton young people's knowledge and experience of drugs has been monitored by surveys at five year intervals since 1969. These were carried out to determine what the young people knew about drugs and thus provide a basis for a realistic programme of health education. The follow up surveys in 1974, 1979, and 1984 found appreciable changes in the knowledge and experience of the young people surveyed.²⁻⁴ We report the results of the latest (1989) survey.

Subjects and methods

To ensure consistency and permit valid comparisons the format of the questionnaire was the same as that used in the four previous surveys. The present survey was carried out among 380 pupils aged 14 and 15 of mixed ability in the fourth year of three Wolverhampton secondary schools: one in a socially deprived area, one in a more affluent area, and a third socioeconomically between. The sample size of 380 contrasts sharply with the peak figure of 648 in 1979. Although the sample sizes were determined by the number on the register in the schools and the rates of absenteeism, samples of 500 and 400 will give a power of about 90% to detect a difference of 10%, assuming proportions of 30% and a significance of 0.05.⁵ In the three schools there were slightly more boys than girls on the register, but the sex ratio among the respondents was unknown

as the pupils were not asked to state their sex. The questionnaire included open ended and ticked replies (see appendix). The pupils had no prior knowledge of the survey and the staff of the school did not take part directly, the questionnaire being handed out and collected by the researchers. In the early surveys a random subsample of 10% of the respondents was interviewed, and there was no evidence of pupils having misunderstood what was required of them.

Whereas many surveys ask the respondents directly if they have ever taken drugs, in 1969 the indirect questions, "Do you personally know anyone taking drugs?" and "Have you ever been offered drugs?" were thought more likely to produce reliable answers.

Results

The sample sizes for the five surveys were 471, 523, 648, 540, and 380. Although all pupils present answered at least part of the questionnaire, there is evidence from a recent study that the absentee effect leads to an underestimation of numbers exposed to drugs.⁶ The total number on the registers in the three schools in 1989 was 481, implying an absence rate of 21%. The number on the registers in 1984 was 621, and the absence rate was 13%. The changes in enrolment are a consequence of political influences and falling birth rates. The 1989 survey was carried out nearer to

the mid-winter peak for absence due to illness than was the one in 1984. Moreover, it was carried out at a time when the adverse effects of the teachers' industrial action on attendance rates were still being felt.

Roughly similar proportions (93% (439) in 1969, 86% (450) in 1974, 92% (598) in 1979, 94% (509) in 1984, and 98% (372) in 1989) answered the question, "What drugs taken by addicts do you know?" (Hereafter, whenever comparisons are made in the text the results are listed in the order 1969, 1974, 1979, 1984, and 1989.) Figure 1 shows how the prevalence with which drugs were mentioned changed over the 20 years. With the exception of cannabis, solvents, and phencyclidine hydrochloride all the changes between 1984 and 1989 were significant ($p < 0.01$). Solvents were mentioned for the first time in 1979 and phencyclidine hydrochloride in 1984. In 1989 both "ecstasy" (methylenedioxymethamphetamine), mentioned by 15 (4%) of the pupils and "crack," a purified form of cocaine, were mentioned for the first time. ("Crack," which was mentioned by 29 (8%) of the pupils, was included in the statistics for cocaine.)

The 86% of respondents who tried to answer the question, "What dangers do you know of each of these drugs?" represents the highest response rate of the five surveys, which were 51%, 63%, 80%, 72%, and 86%. Table I shows the significant changes between the responses in 1984 and 1989 and the proportions of pupils who correctly specified how the drugs they had mentioned were taken. Data not included in table I show that over the five surveys the response "leads to stronger drugs" was mentioned as a danger on only 29 occasions, 16 of which occurred in 1969 (nine relating to cannabis and seven relating to amphetamines). In 1989 "can kill" and "can cause addiction" were indicated by four and one pupils respectively out of 15 relating to phencyclidine hydrochloride; by five and five pupils respectively out of 15 relating to ecstasy; and by 13 and seven pupils respectively out of 29 relating to crack.

Figure 2 shows the changes over the 20 years in the responses to the two questions, "Do you personally know anyone taking drugs?" and "Have you ever been offered drugs?" Almost the whole sample replied to both of these questions. The response rates to the first were 97% (457), 99% (518), 99% (642), 99% (535), and 100%; to the second were 98% (462), 99% (518), 99% (642), 99% (535), and 100%. The change in the proportion of positive replies, 28% (151) for 1984 and 31% (117) for 1989, to the first of these questions was not significant. In 1984, 14% (75) and in 1989, 19% (72) reported that they had been offered drugs, and this difference was just significant ($p \leq 0.05$). Analyses of the 1989 data by school showed that in response to the question, "Do you know anyone taking drugs?" 41% (47) replied positively in the more affluent area compared with 26% (22) and 27% (48) in the other two areas. The differences were significant ($p < 0.05$). The corresponding figures for the question, "Have you ever been offered drugs?" were 30% (35), 13% (11), and 14% (26), and the differences were highly significant ($p < 0.01$).

There was a slightly higher response rate in 1989 to the supplementary questions reported in table II. Analyses of school to school differences on the question, "Where were the drugs offered?" were carried out, two groups of pupils being compared. The first group was from the more affluent area, the remainder comprising the second group. Of the pupils who had been offered drugs and had also stated where, half were from the school in the more affluent area, including 16 out of the 19 who mentioned "party" as a source. The difference between the two groups was significant ($p < 0.01$). There was also a significant difference but in a different direction for "street": 14 of

FIG 1—Number (%) of young people who mentioned each drug when asked what drugs were taken by addicts

TABLE II—Responses of pupils regarding drugs offered to them and taken by people known to them. Figures are numbers (percentage) of respondents

	1969 (n=471)	1974 (n=523)	1979 (n=648)	1984 (n=540)	1989 (n=380)	95% Confidence interval*		1969 (n=471)	1974 (n=523)	1979 (n=648)	1984 (n=540)	1989 (n=380)	95% Confidence interval*
<i>What drugs did people take?</i>								<i>What drugs have you been offered?</i>					
Cannabis	6 (24)	29 (81)	71 (76)	85 (60)	78 (74)†	2 to 26		6 (55)	13 (56)	36 (82)	34 (48)	60 (92)‡	31 to 58
Solvents			1 (1)	29 (21)	8 (8)‡	–21 to –5				2 (5)	15 (21)	1 (2)‡	–30 to –10
Opiates	7 (28)	4 (11)	12 (13)	12 (9)	5 (5)				4 (17)	3 (7)	4 (6)	1 (2)	
Barbiturates		2 (6)	2 (2)	10 (7)					1 (4)	2 (5)	3 (4)		
Cocaine			1 (1)	5 (4)	7 (7)					1 (2)	3 (4)		
Amphetamines	16 (64)	11 (31)	12 (13)	2 (1)	2 (2)			6 (55)	5 (22)	6 (14)	3 (4)		
Lysergide	2 (8)	6 (17)	3 (3)	3 (2)	3 (3)				1 (4)		2 (3)	2 (3)	
No (%) of respondents	25 (5)	36 (7)	94 (15)	141 (26)	105 (28)			11 (2)	23 (4)	44 (7)	71 (13)	65 (17)	
<i>Where did they get them?</i>								<i>Where were they offered?</i>					
Street		10 (12)	27 (26)	35 (30)	40 (40)			3 (14)	11 (32)	21 (43)	35 (50)	38 (56)	
Party	17 (34)	21 (25)	32 (31)	31 (27)	24 (24)			9 (41)	16 (47)	12 (24)	17 (24)	19 (28)	
School	6 (12)	10 (12)	14 (13)	12 (10)	13 (13)			6 (27)	6 (18)	8 (16)	10 (14)	8 (12)	
Disco		4 (5)	29 (28)	9 (8)	15 (15)				3 (9)	23 (47)	11 (16)	10 (15)	
Public house	7 (14)	10 (12)	19 (18)	20 (17)	33 (33)†	4 to 28			3 (9)	4 (8)	2 (3)	15 (22)‡	9 to 30
Coffee bar	16 (32)	5 (6)	5 (5)	2 (2)	1 (1)				2 (6)	1 (2)			
No (%) of respondents	50 (11)	83 (16)	104 (16)	115 (21)	99 (26)			22 (5)	34 (7)	49 (8)	70 (13)	68 (18)	

*For change in percentages between 1984 and 1989.

†Change between 1984 and 1989 significant at $p<0.05$.

‡Change between 1984 and 1989 significant at $p<0.01$.

TABLE III—Reasons given for why young people take drugs. Figures are numbers (percentage) of respondents

	1969 (n=471)	1974 (n=523)	1979 (n=648)	1984 (n=540)	1989 (n=380)	95% Confidence interval*
To feel big, show off, look grown up	123 (29)	145 (30)	214 (34)	235 (47)	180 (49)	
Because friends do, trendy	163 (39)	122 (25)	116 (19)	127 (25)	126 (34)†	3 to 15
For kicks, for fun, to feel good	90 (21)	106 (22)	136 (22)	52 (10)	102 (28)†	12 to 23
To relieve boredom, depression	24 (6)	85 (18)	111 (18)	30 (6)	76 (21)†	10 to 19
To escape problems, reality	81 (19)	98 (20)	86 (14)	41 (8)	71 (19)†	7 to 16
For the experience, out of curiosity	134 (32)	61 (13)	78 (13)	36 (7)	58 (16)†	4 to 13
To calm nerves		53 (11)	133 (21)	47 (9)	14 (4)†	–9 to –2
No (%) who replied	425 (90)	480 (92)	621 (96)	505 (94)	366 (96)	

*For change in percentages between 1984 and 1989.

†Change between 1984 and 1989 significant at $p<0.01$.

TABLE IV—Replies to question Where did you first hear about drugs? Figures are numbers (percentage) of respondents

	1969 (n=471)	1974 (n=523)	1979 (n=648)	1984 (n=540)	1989 (n=380)	95% Confidence interval*
Television	347 (75)	381 (73)	458 (71)	418 (82)	268 (72)†	–16 to –4
Newspapers	200 (45)	144 (28)	145 (23)	140 (28)	73 (20)†	–14 to –2
Friends	56 (12)	53 (10)	95 (15)	63 (12)	79 (21)†	4 to 14
Parents	33 (7)	79 (15)	88 (14)	63 (12)	58 (16)	
Talk in school		89 (17)	73 (11)	43 (8)	61 (16)†	3 to 12
Radio	51 (11)	29 (6)	44 (7)	30 (6)	22 (6)	
Books		47 (9)	29 (5)	25 (5)	17 (5)	
No (%) who replied	460 (98)	519 (99)	644 (99)	508 (94)	372 (98)	

*For change in percentages between 1984 and 1989.

†Change between 1984 and 1989 significant at $p<0.01$.

the 38 were from the first group and 24 from the second ($p<0.05$).

The only other significant ($p<0.05$) difference between the two groups in this section of the questionnaire related to "disco" as a source of drugs for a person known to the respondent. Whereas 10 out of the 39 respondents from the affluent area ticked disco, only five out of the 60 respondents from the second group indicated this as a source.

Table III shows a continued high response rate to the question, "Why do you think young people take drugs?" Whereas "unemployment" was mentioned specifically in 1984, there was no mention in 1989, though 30 pupils (8%) made a specific mention of "pushed" (by a pusher). In 1989 there was also an increase in the number who mentioned "family difficulties" as a particular reason for taking drugs. Across the five survey years almost the whole sample answered the question, "Where did you first hear about drugs?" Table IV shows the detailed responses.

Discussion

These results should be interpreted in the light of social, legal, and medical changes over the past 20 years. Coverage of drug taking by the mass media has

also changed from the hysterical headlines of the late 1960s through a more low key approach in the 1970s to greater coverage, particularly in the local press, in the early 1980s of solvents and then opiates. With the concern about AIDS there has been considerable publicity about drugs in the late 1980s. In addition, the government's mass publicity campaigns of 1986 and 1988 highlighted the dangers of injecting drugs. There has also been greater encouragement nationally of preventive and health education programmes.^{1,7,8}

KNOWLEDGE OF DRUG TAKING

Figure 1 shows that cannabis (the most widely taken illicit drug), which was the most commonly mentioned drug up to 1984, was replaced in 1989 by opiates, which 89% (338) of the respondents mentioned. The prevalence of mentioning cocaine increased significantly from 15% (71) in 1969 to 80% (304) in 1989. Cocaine has been and is the most rapidly growing drug of abuse in the past few years. Crack was referred to specifically by 8% (30) of the pupils. Interestingly the 1989 survey was carried out in January and February, shortly before the discovery of crack in Wolverhampton and its subsequent increased media coverage.

Amphetamines, which were of major concern in 1969 (then mentioned by 44% (207)), became less known with only 2% (11) of the sample mentioning them in 1984 but have increased significantly to 10% (42) in 1989. Since the mid-1980s both locally and nationally illicit amphetamine taking has been on the

FIG 2—Change in positive responses of young people to two questions over 20 years

increase. There is concern locally as about half of those taking this drug do so intravenously with consequent hazards. Solvents, which were first mentioned in 1979 by 8% (50), increased to 20% (104) in 1984, and surprisingly the proportion fell to 17% (63) in 1989. Despite a death in Wolverhampton in each of the years 1987 and 1988 the local press has given fairly little coverage to solvents, which may explain these figures. Lysergide, however, which was widely taken in the late 1960s and 1970s, was mentioned by 87% (351) in 1969, fell to 9% (47) in 1984, and increased significantly to 37% (139) in 1989. Ecstasy was mentioned for the first time in 1989 (by 4% (15) of the pupils). These changes reflect both recent media coverage and availability. Some of the changes in press coverage are evident in unpublished statistics on press cuttings made available by the Institute for the Study of Drug Dependence. The numbers of national press cuttings for opiates were 876 in 1986, 501 in 1987, and 221 in 1988. The corresponding figures for cannabis were 298, 310, 142; for cocaine 460, 245, 314; and for hallucinogens 20, 22, 63.

Table I shows evidence of a more extensive and for the most part more accurate understanding of the dangers of taking various drugs. For example, the proportion of the sample who stated that cocaine can cause dependence doubled in the past five years. The proportion who stated that opiates can kill increased from 32% (124) to 52% (171) and that they can cause dependence increased from 16% (62) to 24% (79).

Knowledge of the methods by which drugs are taken has steadily increased over the 20 years. The fairly high proportion of correct replies for opiates is again likely to reflect recent publicity.

EXPERIENCE OF DRUG TAKING

Between 1969 and 1989 the proportion of pupils who knew someone taking drugs more than doubled (from 15% to 31%) and the proportion who had been offered drugs almost quadrupled (from 5% to 19%). These proportions are probably underestimates because of the effect of absenteeism. Consequently a greater proportion of these young people seemed to be at risk of drug taking. The 1989 results show differences between the school in the more affluent area (41% for, "Do you know" and 31% for, "Have you ever been offered") and the other two schools combined (27% and 14% respectively for these two questions). Surveys recording those who have ever used drugs also show an increasing prevalence. For example, the proportion was found to be 5% in a survey by the Office of Population Censuses and Surveys in 1969,⁹ 9% by Dorn and Thompson in 1973,¹⁰ 15% of boys and 11% of girls by Plant *et al* in 1979-80 in the Lothian Region,¹¹ 25% by Swadi in 1986 in London,¹² and 31% by Newcombe in 1987 on Merseyside.¹³

A study in 1987 by Bean *et al* in Nottingham reported that 41% knew someone taking drugs and 19% had been offered drugs.¹⁴ A survey carried out in Portsmouth and Havant in 1986 by Brown and Lawton also reported that 41% of 14 and 15 year olds knew someone who was taking drugs.¹⁵ Only 5% of this group admitted having taken drugs, though both the above proportions excluded solvents. This particular study also indicated an increasing exposure with age: 58% of those aged 16 to 19 indicated that they knew someone who took drugs.

Among the drugs mentioned by those taking drugs and those who had been offered drugs the most commonly mentioned in 1969, 1974, and 1979 were cannabis, amphetamines, and opiates; in 1984 cannabis and solvents; and in 1989 cannabis, solvents, and cocaine (table II). These findings were similar to those in other studies.^{12 16} Although only a small proportion of the pupils stated where drugs were offered, the

replies reflect the generally increasing importance over the years of the street and public houses as a source of drugs, the variable importance of parties, and not surprisingly the declining importance of coffee bars.

Friends have also been specifically mentioned as a source. Until 1984 these responses taken in conjunction with other evidence¹⁷ supported the view that those who start taking drugs are first offered them by people they know rather than by strangers. In 1989, however, the increase in the mentioning of "street" and "pub" suggests that there may be other influences at work. An analysis of school to school differences for the 1989 survey yielded some interesting findings in this context. The predominance of parties as a source in the more affluent area might explain the socioeconomic imbalance in the responses referred to above. There was also a significant difference between groups for "street" (in the reverse direction) and for "disco" as a source of drugs for a person known to the respondent. The context in which drugs are encountered seems to depend on social class.

REASONS FOR TAKING AND SOURCES OF INFORMATION ABOUT DRUGS

As in the previous surveys, "To feel big, show off, look grown up" (49% of the respondents) and, "Because friends do, trendy" (34% of the respondents) were the most commonly mentioned reasons for taking drugs in 1989. Pupils continue to see social and group pressures as possible influences on decisions to take drugs, a view endorsed by other studies. Swadi and Zeitlin stated that, "It seems that peer influence plays a major part in the initiation and the maintenance of adolescent substance using behaviour."¹⁸ "To relieve boredom, depression," fourth in rank order (21% of the respondents), was significantly more important, while "to calm nerves" (4% of respondents) has become less important. Also changing significantly between 1984 and 1989 were, "to escape problems," an increase from 8% to 19%, and "family problems," an increase from 3% to 9%.

Over the 20 years, though less often mentioned in 1989, television and newspapers have remained the most common source of information. In view of the correlation between press publicity and interest in and possible experimentation with drugs, care must be exercised by producers and editors. At present over sensational coverage could lead to an unhealthy interest in crack and ecstasy. An indirect media effect has also been highlighted by the authors of the qualitative evaluation of the Department of Health and Social Security's Anti drugs-AIDS campaign, who state, "Inevitably, the successful stigmatisation of heroin has allowed other drugs to seem less harmful . . . and seemingly innocuous and recreational."¹⁸

The proportion who ticked, "Talk in school" doubled in the past five years, and the significant increase in the mention of friends as a source of information (from 12% to 21%) underlines the need for young people to be equipped with accurate information in view of the importance of peer group influence. Over the 20 years parents would seem to have a limited role. A commitment by local education authorities through their drug education coordinators could do much, not only to encourage drug education programmes in schools but also to promote education for teachers and parents.

CONCLUSIONS

This survey continues to show that there is considerably increased knowledge of the names of illicit drugs. Although there is an increased awareness of the dangers of drug taking, there remains considerable ignorance and misunderstanding. The results also show increasing exposure to drug taking. The