

Sex, Drugs and Alcohol.....

*A Study of teenage behaviour in
Galway City & County
second level schools.*

*Dr. Emer Mac Hale
December 1994*

	PAGE
INDEX	1
ABSTRACT	2
INTRODUCTION	3
METHODOLOGY	4
RESULTS	6
DISCUSSION	17
REFERENCES	24

Study and report by:

Dr. Emer MacHale, M.F.P.H.M.I.,
Senior Area Medical Officer,
Community Care Offices,
Newcastle Road,
Galway.

Acknowledgements:

Mr. John Newell, U.C.G. for statistical analysis of the results and for his advice and expertise.

Health Research Board for the grant towards the study.

The principals and the students of each participating school for their help and co-operation.

The Western Health Board for sanctioning the study.

Ms. Maura Felle, W.H.B. for her patience and skill in typing this report.

ABSTRACT

Galway city and county consists of a mixed urban/rural population (180,304) in the West of Ireland. It is situated on the Western sea board and has a University, industrial Interests and has a large tourist trade.

2,799 second-level students were surveyed under strict supervision in 40 secondary schools by self-administered anonymous questionnaire.

The survey showed that 21% (574) of those surveyed have had sexual intercourse, mean age 15.45 years and that alcohol was a contributory factor in 35% of reported first sexual intercourse and drugs in only 9%. 68% of respondents said that they always used condoms with 24% using them sometimes and 8% never.

Overall 68% (1,850) reported drinking alcohol as opposed to 11% using drugs. Over 70% of respondents had received sex education and information on alcohol at school and 57% had received information on drugs at school.

Preferred main source for both sexes of sex education, drug and alcohol information was school, followed by parents.

The study concluded that despite a fairly good level of information, many teenagers are involved in risky behaviour.

INTRODUCTION

Galway city and county consists of a mixed urban/rural population (180,304 1991 census) with a large number of young people (18,152) in the 15 - 19 years age group (1). It is situated in the West of Ireland on the Western sea board and has two large third level education institutions (over 8,000 students), large commercial and industrial interests and a very large tourist trade.

In the past few years there have been National (2) (6) and local (3) (4) (5) (11) surveys on alcohol consumption and drug abuse in post-primary school children. Some of these studies have appeared as scientific published reports and others have appeared as press releases (7) (8) (9) . Many of the reports express concern at the availability and large consumption of alcohol in Irish teenagers.

Similar concern has been expressed both nationally and locally at the availability and drug usage among young people. A publication by the Health Promotion Unit of the Department of Health (6) in examining the extent of drug abuse in Ireland states that there is no satisfactory answer to the question "how many people use drugs in Ireland"? It states that facts and figures on alcohol and smoking are more readily available than facts and figures on use of illegal drugs. A survey in 1994 carried out by I.M.S. on 15 - 17 year old teenagers showed that drugs and alcohol appear to be easily available (7).

Another worry relating to teenagers was the anecdotal apparent increase in the number of teenage pregnancies. In fact on reviewing incidence rates in Ireland for years 1982 - 1992, (10) it appears that the numbers have in fact decreased from 3,311 in 1982 to 2,721 in 1992 or that the birth rates per 1,000 females 15 - 19 years has decreased from 21.9 in 1982 to 16.9 in 1992; despite the decrease in numbers this still demonstrates the fact that Irish teenagers are sexually active, but there appears to be little or no information on the level of sexual activity in the general school population between 15 - 18 years.

This may be largely because teenagers do not openly admit to such activity unless pregnancy or infection occurs and again it raises the issue of education/services for such children.

In view of the many issues raised by anecdotal evidence and reports of drug, alcohol and sexual behaviour among teenagers it was decided to do a survey on pupils age range 15 - 18 years in second level schools in Galway City and County.

The aims and objectives of the study were:

1. To determine the level of knowledge in relation to alcohol, drugs and sex of students 15 - 18 years of age.

2. To determine the main source of education re sex, alcohol, and drugs and to ascertain preferred sources.
3. To determine the mean age of first sexual intercourse and use and knowledge of safe sex and level of sexual activity in students (15 - 18 years).
4. To review the availability and consumption of drugs and alcohol in these students and review whether these were involved in subsequent sexual behaviour.

METHODOLOGY:

Education on AIDS/STDs has been offered to all second level schools in the Galway Community Care Area for the past number of years. This education has been given by a public health doctor and has been offered to pupils in the pre-leaving certificate years (age range 15 - 18 years) .

In 1994 in view of the large number of school children who would be offered this education, it was decided to do the survey of these school children 15 - 18 years by questionnaire during the doctors visit to the school for the AIDS/STD Programme.

The AIDS/STD programme/survey was offered to 47 second level schools, mainly to the pre-leaving certificate year; 43 (91%) schools agreed to participate in the survey, but it was only done in 40 schools due to difficulties in arranging suitable times in 3 schools.

The survey was discussed with the principal of each participating school and permission was sought to administer the questionnaire to the pupils prior to the doctors AIDS/STD talk.

The author explained the aims and objectives of the survey to each group of children involved in the study. It was made clear that the results would be of use in the evaluation and planning of health education programmes and should benefit second level students in future years.

It was stressed that the survey was confidential and that respondents could not be identified by filled questionnaires. The questionnaire was self-administered by each pupil in the presence of the author with teachers also involved in supervision in the larger schools.

The questionnaire consisted of 32 questions and questions were asked in relation to the pupils own sexual behaviour, drug and alcohol consumption and their influence on first sexual intercourse.

Data was also requested on education and knowledge of sex, alcohol and drugs and also on preferred sources of such education. More specific questions were asked in order to

test their knowledge re issues relating to sex, e.g. the efficacy of condoms in preventing AIDs/STDs. An initial pilot study was done to evaluate the questionnaire.

The schools involved in the survey were stratified in the following ways.

1. Type of School:

Boys only	-	n	=	5
Girls only	-	n	=	9
Mixed sex schools	-	n	=	26

2. Geographic location:

City schools	(n	=	9)
Town schools	(n	=	11)

i.e. total aggregate town area with population of or more (1991 Census).

Rural (n = 20); towns or villages with population less than 1,500.

TOTAL

City & town schools	=	20
Rural schools	=	20

The data was analysed on computer using Chi-squared test (X_2) to test statistical significance of results being compared in the data.

RESULTS

Demographics

Data was recorded on a total of 2,799 cases of which 44% were male, 56% female. The highest percentage of cases were females from a rural background, lived in the country, and went to mixed schools (see table 1 below).

Table 1 No. cases and mean age by sex

Sex	No. Cases (%)	Mean Age
Male	1222 (44%)	16.5 yrs
Female	1537 (56%)	16.2 yrs
Total	2759 *	16.4 yrs

* Sex data was unrecorded for 40 (1.4%) of cases.

Table 2 Geographical location of cases by sex and school type with percentage of table (totals in brackets)

Geographic Location/ School Type	Mixed School	Boys School	Girls School	Total (%)
City				
Male	231 (8.4%)	222 (8.1%)	0	453 (16.4%)
Female	97 (3.5%)	0	269 (9.8%)	366 (13.3%)
Town				
Male	134 (4.9%)	180 (6.5%)	0	314 (11.4%)
Female	133 (4.8%)	0	365 (13.3%)	498 (18.1%)
Rural				
Male	428 (15.5%)	271 (1.0%)	0	455 (16.5%)
Female	527 (19.1%)	0	141 (5.1%)	668 (24.3%)
Total (%)	1550 (56%)	429 (16%)	775 (28%)	2754(100%)

* Note 45 (1.6%) cases were missing demographics data

From the table above it can be seen that the girls from mixed schools account for nearly 20% of all cases while boys in rural boys schools account for only 1% of all cases.

Sex, Drugs and Alcohol Education

Approximately 70% of cases had both sex and alcohol education at school with the gender breakdown as follows:

Table 3 Percentage of cases having sex education at school

Sex Education	Male (%)	Female (%)	Total (%)
Yes	784 (65%)	1097 (73%)	1881 (70%)
No	419 (35%)	410 (27%)	829 (30%)
Total	1203	1507	2710

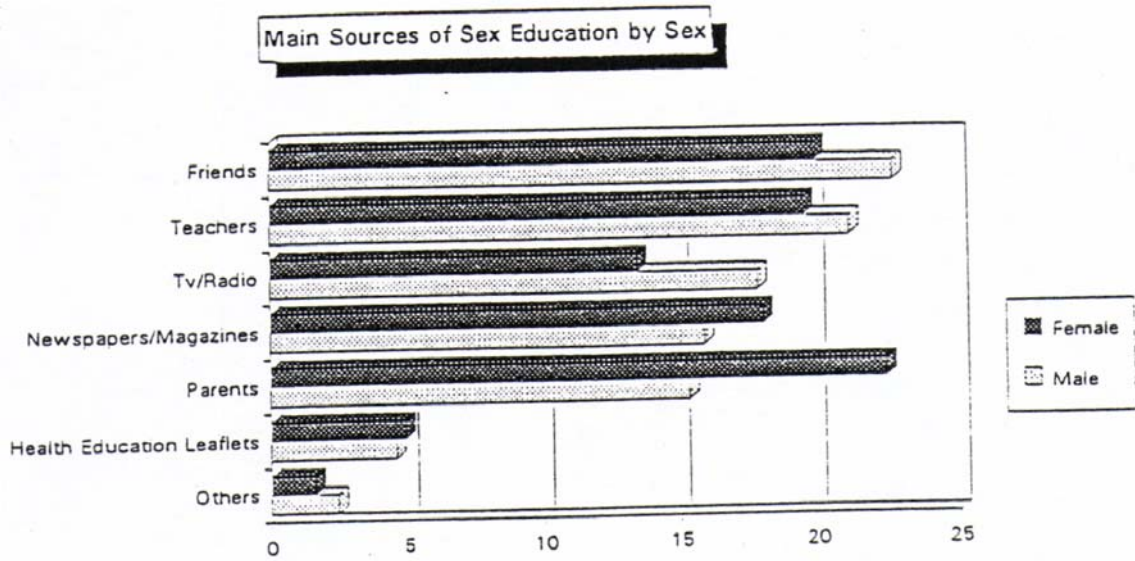


Figure 1 shows that the 70% of respondents who had received sex education that the main source was from parents, friends and teachers.

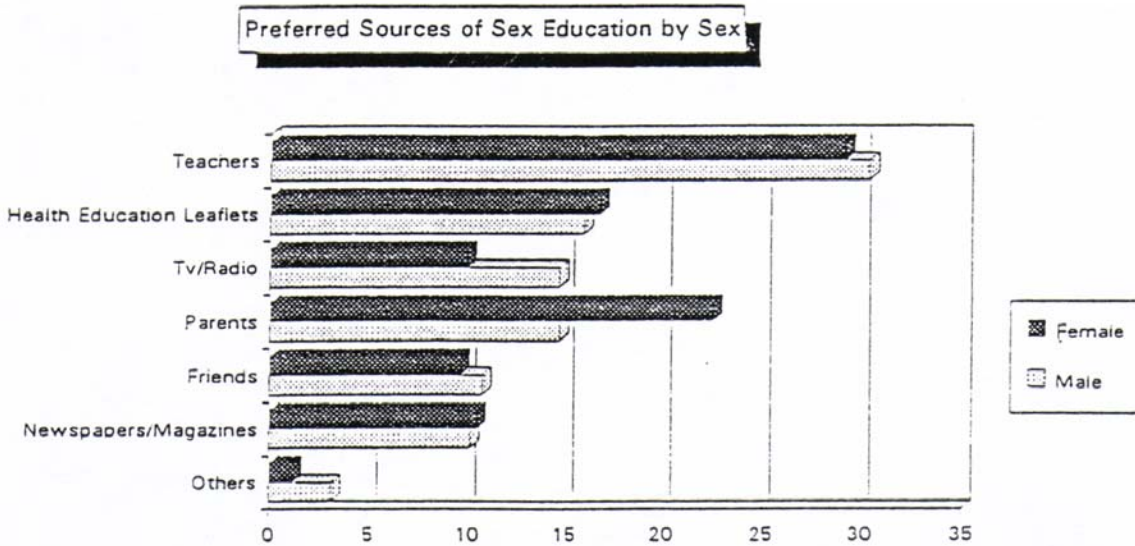


Figure 2: This shows that respondents preferred source for sex education was largely from teachers, followed by parents and Health Education Leaflets.

Table 4 Percentage of cases having alcohol education at school

Alcohol Education	Male (%)	Female (%)	Total (%)
Yes	843 (70%)	1088 (72%)	1931 (71%)
No	366 (30%)	419 (28%)	785 (29%)
Total	1209	1507	2716

From the two tables above the percentages are similar but for the fact that a higher proportion of males have had alcohol education that sex education and in both cases there is a higher proportion of females having both sex and alcohol education.

Table 5 Percentage of cases having drug education

Drug Education	Male (%)	Female (%)	Total (%)
Yes	682 (57%)	845 (57%)	1527 (57%)
No	509 (43%)	637 (43%)	1146 (43%)
Total	1191	1482	2673

Overall, 57% of respondents had had drug education but there was a statistically significance ($p < 0.01$) high proportion of rural males and females lacking drug education -in all school types.

Table 6 Percentage of cases having adequate knowledge of sex

Knowledge of Sex	Male (%)	Female (%)	Total (%)
Yes	961 (80%)	1111 (74%)	2072 (76%)
No	243 (20%)	396 (26%)	639 (24%)
Total	1204	1507	2711

Respondents were asked if they thought that their own knowledge was adequate in relation to sex education, overall 2,072 (76%) believed that their own knowledge was adequate but it is interesting to note that a significantly higher proportion of males answered in the affirmative despite a higher proportion of females having received sex education in school (Table 5)

DRUG EDUCATION:

Overall only 57% of respondents had received education on drugs, the main source being from teachers, T.V. & Radio.

The preferred source for drug education was teachers, with health education leaflets and parents following.

Alcohol and Drug Use:

Table 7 Percentage of cases drinking alcohol

Alcohol Drinkers	Male	Female	Total (%)
Yes	892 (74%)	958 (64%)	1850 (68%)
No	307 (26%)	547 (46%)	854 (32%)
Total (%)	1199	1505	2704

There was a significantly higher proportion ($p = 0.00$) of male alcohol drinkers.

1,850 (68%) of respondents said that they drank alcohol, there was a statistically significant higher proportion of male alcohol drinkers than female.

Table 8 Percentage of alcohol drinkers by geographical location, school type and sex

Alcohol Drinkers	Geographic Location/ School Type/Sex	Mixed School	Boys School	Girls School	Total (%)
Yes	City	Male	164 (8.9%)	181 (9.8%)	345 (18.7%)
		Female	69 (3.7%)	0	252 (13.7%)
	Town	Male	90 (4.9%)	151 (8.2%)	241 (13.1%)
		Female	71 (3.9%)	0	322 (17.5%)
	Rural	Male	283 (15.3%)	23 (1.2%)	306 (16.6%)
		Female	232 (15.3%)	0	380 (20.6%)
Total (%)		959 (52%)	355 (19.2%)		1846 (43%)

From this table we can see a large proportion of alcohol drinkers in mixed schools in general and in rural schools in particular. This proved significant ($p = 0.00$) when comparing alcohol drinkers against non alcohol drinkers by school and sex.

Of the 1,850 teenagers who drank. 32% of males and 17% of females drank each week.

Table 9 How frequent alcohol drinkers drink

	Males %	Females %
More than Ones Weekly	14	4
Weekly	32	17
Fortnightly	18	22
Less Than Monthly	14	27
Monthly	22	30

Beer was the favourite for both males (66.5%) and females (55%) followed by spirits (3 units) for 23% of males and 32% of female drinkers.

Drug Use

Overall, 11% (271) of respondents said that they had used drugs. There was a significantly higher proportion of male drug users 165 (15%) compared to female drug users 106 (7%).

Table 10 Percentage of drug users by geographical location, school and sex

Drug Users Yes	Geographic Location/ School Type/Sex	Mixed School	Boys School	Girls School	Total (%)
	City				
	Male	62 (23%)	41 (15.1%)	0	103 (38%)
	Female	11(4.1%)	0	31 (11.4%)	42(15.5%)
	Town				
	Male	7 (2.69%)	13 (4.8%)	0	20 (7.4%)
	Female	5 (1.8%)	0	0 28(10.3%)	33 (12.2%)
	Rural				
	Male	40 (14.8%)	2 (0.7%)	0	42 (15.5%)
	Female	14 (5.2%)	0	0 17 (6.3%)	31 (11.4%)
Total (%)		139 (51%)	56(21%)	76 (28%)	271 (43%)

From this table we can see a large proportion of males in city mixed schools when compared to the other locations. When this was analysed in respect to sex there was a significant difference ($p = 0.00$) between the proportions of boys in mixed schools that took drugs than the girls, see table below.

Canabis, L.S.D. and ecstasy were the most commonly used drugs with boys in city mixed schools having a significantly higher use of drugs.

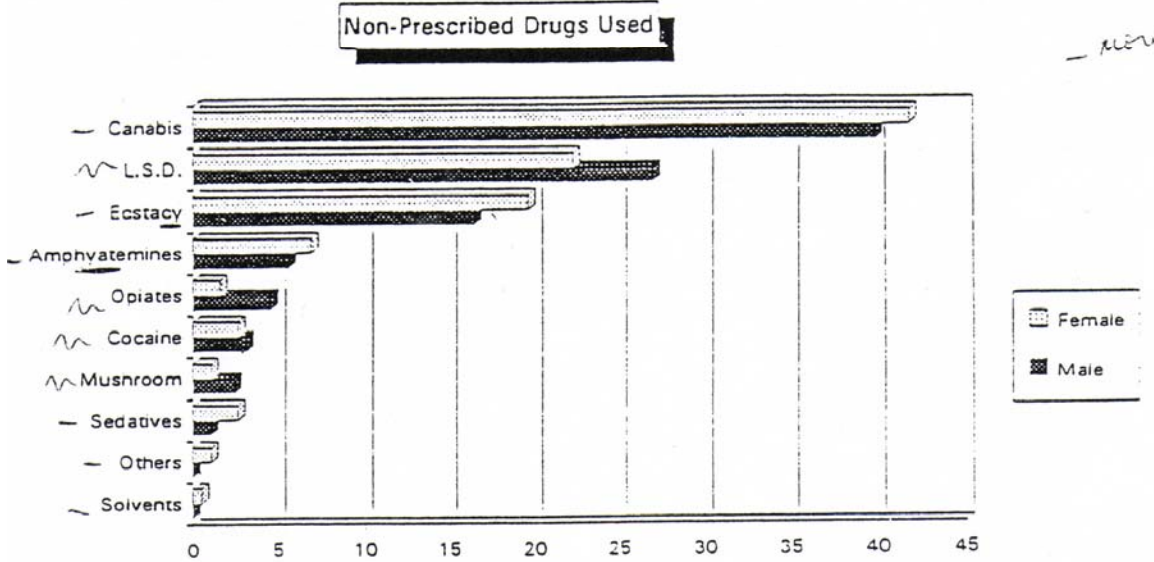


Fig. 3

Of the 271 drug users, it would appear that over 55% had taken them only occasionally with 15% of males taking them at least weekly compared to 11% of females.

General Availability of Drugs

Table 11 Percentage of all cases by ease of availability and location

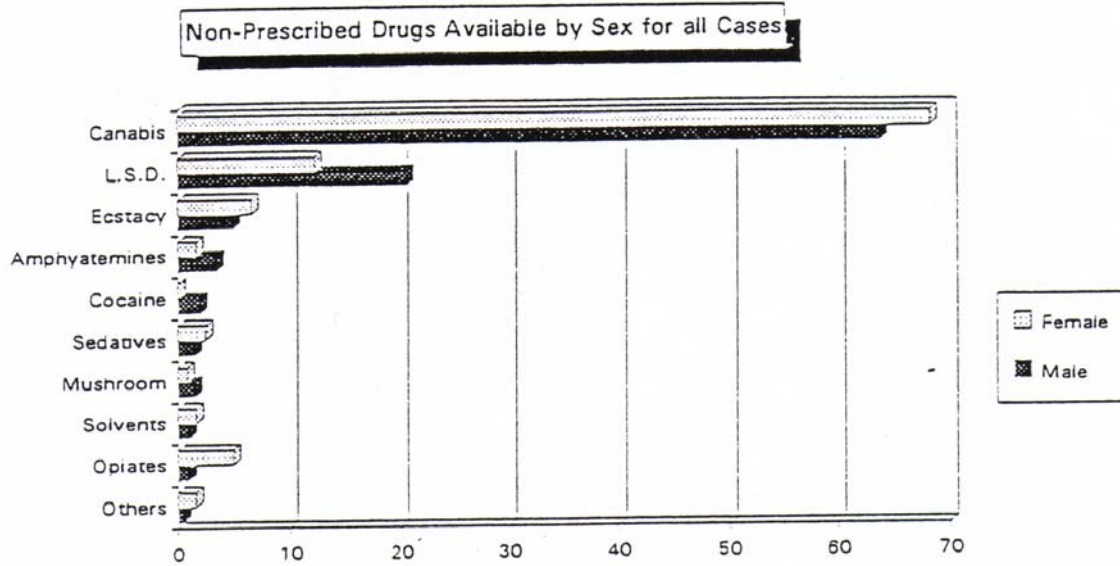
Drugs Easily Available (All Cases)	City		Town		Rural	
	Male(%)	Female (%)	Male(%)	Female (%)	Male(%)	Female (%)
Yes	284 (74%)	210(67%)	112(43%)	219(51%)	1356 (37%)	146 (29%)
No	98 (26%)	102 (33%)	151 (57%)	214(49%)	233 (63%)	365 (71%)
Total	382	312	263	433	368	511

From this table it can be seen that a higher proportion of city males reported easy availability while rural areas in all cases reported less easy availability. For the dity alone, this proportion of males was significant (p = 0.04) when compared to the females.

n = 2,269.

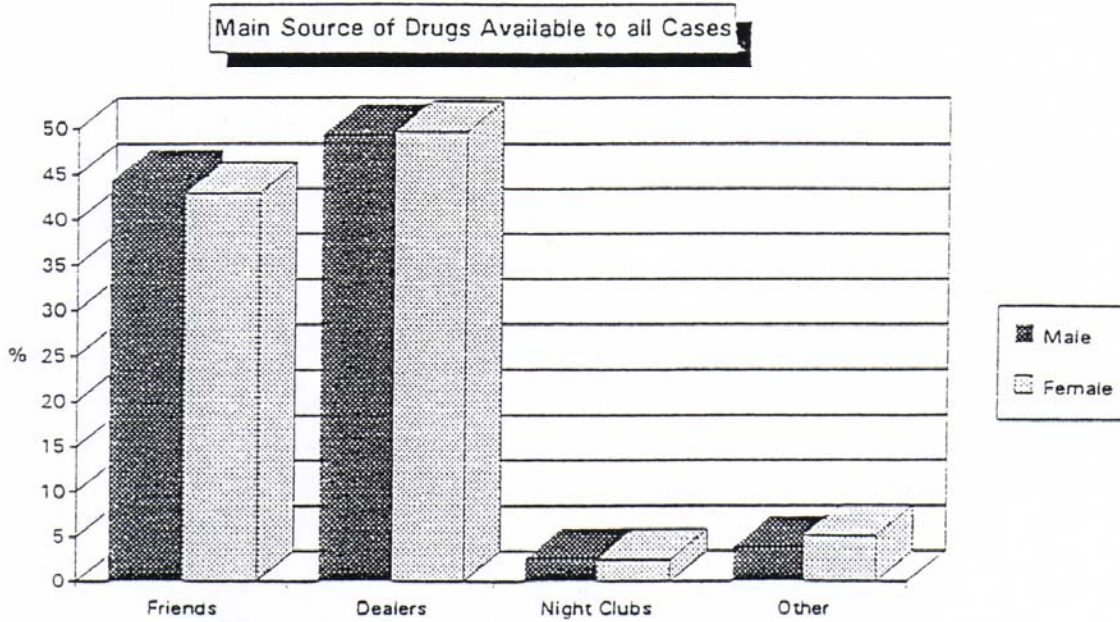
Cannabis was by far the most easily available non-prescribed drug for all respondents. Figure 4.

Figure 4



Dealers, followed by friends were the most common source of drugs to all respondents.

Figure 5



Sexual Behaviour

Table 12 respondents having had sexual intercourse

Sexual Intercourse	Male	Female	Total (%)
Yes	342 (29%)	232 (15%)	574 (21%)
No	826 (71%)	1280 (85%)	2106 (79%)
Total (%)	1168	1512	2680

There was a significantly higher proportion of males having intercourse than females ($p = 0.00$). The next set of questions related to the cases that have had sex.

A breakdown of those who had sex by school and geographical location yielded the following results.

Table 13 Respondents having had sexual intercourse by school type

Sexual Intercourse	School Type/Sex	Male	Female	Total (%)
Yes	Mixed	198 (7.4%)	107 (4%)	305 (11.4%)
	Boys School	144 (5.4%)	-	144 (5.4%)
No	Girls School	-	124 (4.6%)	124 (4.6%)
	Mixed	557(20.8%)	636 (23.7%)	1192 (44.6%)
	Boys School	269 (10.1%)	-	270 (10.1%)
	Girls School	-	640 (23.9%)	640 (23.9%)
Total (%)		1168 (44%)	1507 (56%)	2675 (57%)*

The highest proportion of those having sex were males from mixed schools, and the highest proportion of those not having sex were girls in girls schools.

The mean age of cases having their first sexual intercourse was 15.45 years for all cases with the means for males and females at 15.47 years and 15.4 years respectively.

Figure 6

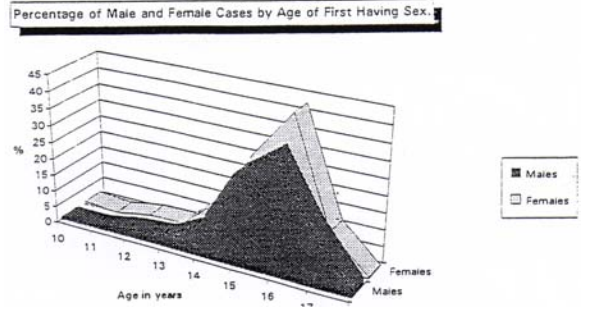


Table 14 Percentage of respondents who claim alcohol was a contributing factor to sex

Alcohol Contributed	Male	Female	Total (%)
Yes	129 (38%)	71 (31%)	200 (35%)
No	212 (62%)	158 (69%)	370 (65%)
Total (%)	341	229	570

There was a borderline significant difference ($p = 0.09$) of the proportion of cases who admitted that alcohol contributed to sex, probably due to the higher proportion of males in the ‘Yes’ category.

Overall the answers implied that 38% said that alcohol was a contributory factor to those having first sexual intercourse.

Table 15 Percentage of respondents who claim drugs were a contributing factor to sex

Drugs Contributed	Male	Female	Total (%)
Yes	30 (9%)	19 (8%)	49 (9%)
No	302 (91%)	208 (92%)	510 (91%)
Total (%)	332	227	559

There was a small proportion of cases who admitted that drugs contributed to their first sexual experience, this was not significantly different for both males and females ($p=0.8$).

Table 16 Percentage of respondents who claim a casual partner involved

Casual Partner	Male	Female	Total (%)
Yes	174 (57%)	75 (40%)	249 (51%)
No	130 (43%)	112 (60%)	242 (49%)
Total (%)	304	187	491

There was a significant difference ($p = 0.00$) in the proportions in the above table where the proportions of males was similar in both categories of casual and non casual compared to a difference in proportions for females.

Table 17 Percentage of cases who used a condom at first sexual intercourse

Condom Use	Male	Female	Total (%)
Yes	235 (72%)	156 (72%)	391 (72%)
No	95 (28%)	595 (28%)	154 (28%)
Total (%)	330	215	473

There was no significant difference ($p = 0.7$) between males and females using a condom. When asked how often they had sex 50% of sexually active respondents only had sex occasionally approximately 14% had sex weekly.

Table 18 Percentage of cases who used condoms

Regular Condom Users	Male	Female	Total
Never	26 (9%)	13 (7%)	39 (8%)
Always	199 (68%)	122 (67%)	321 (68%)
Sometime	68 (23%)	47 (26%)	115 (24%)
Total	293	182	475

There was no significant difference ($p = 0.69$) in the proportions of cases relative to their condom use. However, overall, 32% were involved in risky behaviour.

(Note the above analysis of all the questions relating to the respondents having sex was carried out relative to where they lived and there was no significant difference in the proportions across the geographical locations.

Knowledge re Condoms/Pill efficacy in relation to AIDS and Sexually Transmitted Disease (S.T.D.) Infections.

The teenagers were asked specific questions to test their existing knowledge re the efficacy of condoms or Pill in reducing the risk of AIDS/HIV and infections.

Table 19 Percentage of all cases by knowledge of efficacy of condoms against HIV infections

Condoms and A.I.D.S	Male	Female	Total (%)
Complete Prevention	127 (11%)	127 (8%)	254 (9%)

Some Protection	989 (83%)	1254 (83%)	2243 (83%)
Do Not Prevent	22 (2%)	57 (4%)	79 (3%)
Don't Know	53 (4%)	76 (5%)	129 (5%)
Total (%)	1191	1514	2705

There was a significant difference in the proportions for the above table, probably due to discrepancy between male and female proportions in the first and third category, again showing the better understanding of the females.

Table 20 Percentage of all cases by knowledge of condoms and STDs

Condoms and STDs	Male	Female	Total (%)
Complete Prevention	88 (8%)	113 (8%)	201 (8%)
Some Protection	838 (73%)	1075 (72%)	1913 (72%)
Do Not Prevent	53 (4%)	95 (6%)	148 (6%)
Don't Know	176 (15%)	202 (14%)	378 (14%)
Total (%)	1155	1485	2640

There was no significant difference between the categories in the above table.

Table 21 Percentage of all cases by knowledge of the pill and STDs

The Pill and A.I.D.S.	Male	Female	Total (%)
Yes	77 (7%)	52 (3%) 129 (5%)	
No	848(72%)	1255(83%)	2103(78%)
Don't Know	247 (21%)	207 (14%)	454 (17%)
Total (%)	1155	1485	2640

Again the seemed lack of male knowledge is evident in the above table where there is a significantly larger proportions in the 'Don't Know' category, and a significantly larger proportion giving the incorrect answer (p = 0.0).

What do letters A.I.D.S. stand for?

Table 22

Knowledge of A.I.D.S.	Male	Female	Total (%)
Correct	306 (25%)	637 (42%)	943 (34%)

Incorrect	910(75%)	894(58%)	1804 (66%)
Total (%)	1216	1531	2747

This table proved significant ($p = 0.00$) which is due to the difference in proportions of correct and incorrect, responses between males and females, where a higher proportion of females answered correctly with a higher proportion of males answering incorrectly.

Respondents were asked what the letters A.I.D.S. stand for and were classified as correct if “Immune Deficiency” was mentioned.

DISCUSSION

SEX, DRUGS, AND ALCOHOL EDUCATION

At present in Ireland, education in schools re sex, AIDS/STD, drugs and alcohol has been given on an ad hoc basis as there has been no compulsory inclusion of these in the curriculum. In 1994 the Minister for Education in Ireland, Niam Breathnach made proposal to draw up guidelines to provide sex education to all primary and secondary schools, this education would include issues of sexuality and relationships. This proposal has been largely welcomed but has been met with some resistance by some conservative groups and at a recent meeting of a group Public Policy Institute of Ireland such terms as “disgust and revulsion” were used in relation to such education. (Ref. 13).

Despite the lack of policy re such education some 70% of respondents had received some sex and alcohol education at school, mixed schools and girls only schools got more education than boys schools and similarly city and rural schools got more education than town schools.

Education re drugs was only available to 57% of respondents and similarly mixed and girls only schools in city and rural areas got more education than town schools. it is difficult to understand the discrepancy between education in town schools and it would appear that these children are in as much need of education as their peers when one looks at their behaviour patterns in relation to alcohol, drugs and sex. It is interesting to note that both parents and friends were also mentioned by almost 23% as sources of sex/alcohol education.

In relation to sex education, over 30% would prefer to get this from teachers followed by Health Education Leaflets and of the girls 22% would like to get their education from parents, thus both teachers and parents appear to play the main part in sex, drugs, and alcohol education in Ireland.

76% overall thought that their knowledge in relation to sex was adequate - 80% of boys as opposed to 74% of girls.

Interestingly, students in town schools gave lower figures for their adequacy of knowledge re sex than students in city and rural schools and this may reflect the lower availability of sex education in some town schools.

ALCOHOL AND DRUG USE:

ALCOHOL:

There have been many studies and reports on alcohol consumption in teenagers in Ireland. 68% (1,850) of respondents in this study claimed that they had drunk alcohol with more male 74% than female (64%) drinkers. In 1987 Johnson in a study (11) of 262 Galway Secondary School students (14 - 17 years) found that 61.1% were classified as drinkers. Barry in a study in 1989 of South County Dublin school children (14 - 17 years) reported that 72% had had an alcoholic drink. Johnson (2) in a National Study in 1991 showed that of school children (12 - 15 years) 39% had ever drunk and in another study Johnson in 1990 (3) of Galway school children (12-15 years) 26.05% had ever taken one whole alcoholic beverage and 20% of the total sample were classified as drinkers. Moroney (5) in his study in 1993 of pupils (13 - 17 years) in Roscommon and Co. Galway indicated that 53.4% of pupils drank. Similarly to other studies more males than females drank with 32% of males and 17% of females drinking weekly.

This present Galway study showed that the highest proportion of drinkers overall were from mixed schools generally and in particular from rural areas, followed by girls from girls only schools in town areas. The high level of drinking in rural areas may reflect the lack of other meeting places or a choice of social or recreational outlets.

The most popular drink was beer for all drinkers, followed by spirits - this finding is similar to preferences in the Johnson study (11) (2) Moroney study (5) when beer was the favourite drink both for males 95.9% and females, 55.3%.

In the present study 23% of males and 32% of females were 3 unit spirit drinkers, Johnson found that 36.2% of all respondents drank spirits.

Wine did not appear to be a popular drink in the Galway study unlike the Barry (4) study where wine was the second most popular drink especially for girls.

The results of this study are consistent with the findings of other studies which report high levels of alcohol consumption among Irish teenagers.

In Ireland the minimum legal age at which a person may drink on a licenced premises is eighteen years of age, this law is often not adhered to and teenagers may also get their alcohol from off- licenced premises and supermarkets.

DRUG ABUSE:

(271) 11% of respondents had used drugs 15% of males and 7% of females, Cannabis, L.S.D. and Ecstasy were the most popular drugs and the teenagers in mixed city schools were the most likely to use drugs, of those who reported taking drugs approximately 15% took them weekly.

Moroney in 1993 (5) reported a level of over 19% drug use in the Galway/Roscommon study, with glues/solvents the most commonly used and then cannabis.

Drugs were easily available to the respondents (48.7%) in the current study but there is easier availability for city males than for the rural areas. Dealers were the most common source followed by friends. It is a cause for concern that drugs appear to be so easily available and in the local media reports (8) in February, 1994 the Manager of a large Galway City Shopping Centre sent a letter to city school principals advising them that drug dealers were operating in the vicinity of the Shopping Centre. Apparently, 20 people were charged in Galway City in 1993 with being in possession of drugs with the intention of selling them.

The Department of Health and Health Education have recently produced information leaflets and a book (6) on drug abuse. It appears that it is a growing problem in the West of Ireland and one which needs to be addressed as a priority. Fortunately there does not appear to be a major intravenous drug abusing problem in the Galway area and all efforts should be made to prevent such a serious problem.

SEXUAL BEHAVIOUR:

Despite an extensive computerised literature search, there appears to be very little information on the sexual behaviour of teenagers in Ireland, some information is available on teenage sexual behaviour in reports from Family Planning Clinics (14), S.T.D. Clinics (15), and single parent studies (10) (22), but these may not represent the behaviour of the general teenage population.

Studies conducted in Ireland, Europe, U.S.A. and Australia report that young people are engaging in sexual activity at an early age.

21% (574) of the Galway teenagers had had sexual intercourse, 29% (342) of males and 15% (232) of females. The mean age of their having first sexual intercourse was 15.45 years for all cases with a mean age of 15.5 years for males and 15.4 years for females.

The Sunday Independent/I. M. S. Survey (17) in 1994 of 601 men and women from all over Ireland reported that 30% of those surveyed between 15 - 18 years had had sexual intercourse and that the mean age was 16 years. Fitzpatrick's report (15) in 1992 in a review of teenagers attending a Dublin S.T.D. Clinic reported their mean age of first coitus as 16.1 years. Bowman (14) in a study in 1974 of 50 single girls attending a Family Planning Clinic reported that 26% of those interviewed had had first sexual intercourse by 16 years, this figure rising to 44% of the sample having had intercourse by 18 years of age. Although this sample may not fully represent the general teenage population and is not recent it demonstrates that teenagers were sexually active from an early age - 20 years ago despite the lack of contraceptive facilities. Bowman stressed the need for help and encouragement for young people towards a responsible approach to sexual relationships. The fact that 2,721 pregnancies in 15 - 19 year old girls were recorded in 1992 in Ireland is very definite evidence that teenagers are engaging in early sexual activity.

In the U.K. in 1964 only 16% of 15 - 19 year olds had experienced sexual intercourse compared to 52% in 1990 (16) and another study in Australia (18) showed that mean age of first coitus is declining in that study in 1992 51% of students 15 - 19 years had had intercourse.

The Irish studies demonstrate that Irish teenagers are engaging in sexual activity at an early age and that trends are quite similar to other countries over the past 10 years.

In the Galway study 35% of respondents said that alcohol contributed to their having first sex and in 9% of cases non-prescribed drugs were cited as a contributory factor.

Pitzpatrick (15) in her study of teenage girls attending an S.T.D. Clinic reported a high rate of unprotected and alcohol related coitus in the study. A study by Powell (22) et al in Dublin in 1982 of 200 unmarried mothers reported that 27% were under the influence of alcohol at time of conception.

This high level of alcohol associated first sexual intercourse is in marked contrast to the U.K. Study (19) where alcoholic drink is a relatively infrequent factor in first sexual intercourse where only 4% of men and 2.7% of women said alcohol was a factor. It appears that many adolescents in the U.K. now make a conscious personal choice about first sexual intercourse.

It appears that the high level of alcoholic drinking in Co. Galway teenagers may also be a contributing factor approximately 1/3 of cases of first sexual intercourse and that drugs may also influence subsequent sexual behaviour to a lesser degree. 51% of Galway respondents said that first sex was with a casual partner - 57% of males and 40% of females (391).

72% of both male and females respondents said that they used a condom at first intercourse. Thus conversely 28% (154) did not use a condom and thus engaged in high

risk activity. 68% of respondents who have regular sexual intercourse said that they always use condoms. In an Australian study (18) there was a high level of condom usage 89.4% in sexually active student 13 - 17 years.

Similarly in the major U.K. study (19) of over 18,000 people it shows that the younger generation are more likely to use (60%) condoms at first coitus than in previous years, this suggested that public education about AIDS and its risks are leading to changing behaviour.

Knowledge re Condom/Pill efficacy in reducing spread of HIV/STDs.

The teenagers were asked specific questions to test their knowledge re the protective value of condoms in reducing AIDS/HIV infection. 83% (2,243) believed that condoms reduced the risk of HIV and while 9% believed that they gave complete protection, significantly more males 11% than females believed in complete protection.

72% (1,913) believed that condoms reduced the risk of S.T.D.s while 8% believed that they gave complete protection - there was no significant sex difference.

Fogarty (20) in a survey in 1989 of Leaving Certificate students in Galway City and County reported that 78% (2,030) of respondents believed that the spread of HIV could be partially prevented by condom use, while 16% believed that condoms would completely prevent viral transmission, again more males 19% than females 13% believed in a complete protective effect of condoms. In this present study when asked if the contraceptive pill protected against the HIV virus, 78% said no, 72% males and 83% of females and a total of 22% of respondents - 28% of males and 22% of females either did not know or thought that the pill was protective against HIV infection.

In a national survey (21) of population 15 - 35 years in 1987 only 51% of respondents stated that condoms reduce the risk of HIV infection.

A recent study of 177 undergraduate students in an Irish University (mean ages 20.2 years) when asked how effective different methods of contraception were at preventing sexual transmission of disease 28% believed that non-barrier methods were effective to some degree. Some 64% thought barrier methods the only way to prevent such infection and the remaining 8% did not know or respond.

This study of university students showed that the importance of condoms in the prevention of STDs was not understood and if understood not practiced for a variety of reasons.

In the present study respondents were asked what the letters A.I.D.S. stands for. Overall, only 34% were clarified as correct and there was a significant difference in that more females 42% than males 25% answered correctly. Fogarty found that 62% of his subjects were correct.

The present study indicates that the level of knowledge of Galway teenagers appears to have improved when compared to previous studies (20), it is also interesting to note that females appear to be better informed in relation to the efficacy of condoms, the lack of HIV protection of the contraceptive pill and in knowing what the letters AIDS stand for. One explanation for this may be that in 73% of the girls had received school sex education compared to only 65% of boys, girls were also more likely to have received sex education from their parents.

Although the level of knowledge re sex has improved, there are still some apparent gaps in approximately 20% - 30% of teenagers knowledge in the present study re pill efficacy, condom use which could result in risky behaviour. It is also worrying that 51% of respondents claimed that a casual partner was involved at first intercourse with all the inherent risks of acquiring infections with such encounters.

HEALTH EDUCATION:

On reviewing the results of the present study it would appear that despite an increase in their level of knowledge that some teenagers are still partaking in risky behaviour, this is a well recognised phenomenon in health education that adequate knowledge alone does not change behaviour. The study of 177 Irish University (23) students showed a high degree of risk taking with respect to sexually transmitted diseases and pregnancy despite the fact that mean age was 20.2 years and that they had achieved third level academic status. The results showed a combination of lack of knowledge and risk taking.

This particular University student study makes one wonder re the adequacy of education in relation to sexuality, relationships, assertiveness and safe sexual practices and to question whether this subject has been neglected in the "points race".

The Netherlands has been the most successful country in the Western World in reducing the incidence of teenage pregnancy (15 - 19 years). They have reduced their pregnancy rates from 28/1,000 in 1971 to 10.4/1,000 in 1990 and this is mainly due to a Government led strategy of providing sex education from an early age.

A W.H.O. Article (25) reviewing studies that evaluated the sexual behaviour of students exposed to sex education concluded that sex education leads to safer behaviour. None of the studies revealed evidence of earlier or increased sexual activity in those receiving sex education. In fact, the review stated that sex education delayed the onset of sexual activity or resulted in a reduction in its overall extent, it also stated that access to counselling or contraceptive services did not encourage earlier or increased sexual activity and that consequently safer sexual practices were used.

Many reports now stress the importance of sex education before young people become sexually active and that sex education should not only encompass the facts, but should also focus on behaviour, assertiveness, self-esteem, decision making, relationships and sexuality. It is also recommended that such education should be given in an open and

positive way and not involve all “no” or “do not” messages and that this type of education should enable youngsters to make decisions concerning their health.

In 1994, The Irish Department of Health produced a Health Strategy (26) with a Four Year Action Plan - this aims to continue and enhance existing primary education programmes on HIV/AIDS and also “to ensure that within the next four years, 75% of the population aged 15 years and over knows and understands the recommended limits for alcohol consumption” - this to be achieved by educational programmes.

It is hoped that the Department of Education’s proposal to provide primary and secondary level schools with guidelines for sex education in conjunction with the Department of Health recommendation for health promotion in drug, alcohol and HIV/AIDS Programmes will ensure that school children will not leave school without having access to this necessary information.

The results of this study and other studies reviewed indicate that it is important that parents and service providers face up to the reality of adolescent sexuality, teenage drinking and drug taking and address the situation in order to give teenagers as much support, information and advice as required in such a pressurised modern/changing society.

REFERENCES:

1. Census 1991 - County Galway.
2. Johnson N. A survey of alcohol use among a National sample of second year second level students. Combined Action Galway 1990.
3. Johnson N, Monaghan L. Donoghue A., Ryan K. A survey of alcohol use among first and second year second level students in Galway City. Combined Action, Galway, 1990.
4. Barry J. Alcohol use in post-primary school children. Ir. Med. J. July, 1993. Vol. 86. No. 4, 128-129.
5. Moroney L. Smoking, alcohol and other drug use amongst post-primary school pupils in Co. Galway and the Elphin Diocese Area of Co. Galway. Dec. 1993. Roscommon Regional Youth Service.
6. Health Promotion Unit, Department of Health; Facts about drug abuse in Ireland. 1994. P. 13 - 14.
7. I.M.S. Survey; Teenagers and Drugs; Sunday Independent. May, 8, 1994. P. 14 - 15.
8. City Tribune Galway. Feb. 25, 1994. p. 1. City Centre. Drugs alert to schools.
9. Irish Times editorial. Children & Drugs; April, 7th, 1994. p.13.
10. Federation of Services for Unmarried parents and their children; Teenage Births, 1982 - 1992.
11. Johnson D D. G. Correlates of Adolescent alcohol involvement". M.A. Thesis (no. 1513) p. 183. U.C.G.
12. Williams E. Contraceptive compliance among young people, Br. J. Sex Med. May/June 1994. Vol. 21 No. 3 P. 13.
13. Irish Times Report. Paul Cullen, Education Correspondent. 14, November, 1994. p. 10.

14. Bowman E.P. Sexual and contraceptive attitudes and behaviour of single attenders at a Dublin Family Planning Clinic. *J. Biosoc Science* 1977. 9. 429 - 445.
15. Fitzpatrick C., McKenna P., Hone R: Teenage girls attending a Dublin Sexually Transmitted Disease Clinic: A Socio - sexual diagnostic profile. *I.J.M.S.* July, 1992 Vol. 161. no. 7 P. 460 - 462.
16. Williams E; Contraceptive compliance among young people. *Br. J. Sex. Med.* May/June, 1994. p. 12 - 15.
17. I.M.S. Survey. Sex in Ireland, *Sunday Independent*. Feb. 13, 1994. 1, 62 - 72.
18. Dunne M.P, et al. Age-related increase in sexual behaviour and decrease in regular condoms use among adolescents in Australia. *Int. J. STD & AIDS* 1994; 5: 41 - 47.
19. Wellings K; Sexual behaviour in Britain. Penguin. Article in *The Sunday Review; Independent on Sunday*, 16th January, 1994.
20. Fogarty J. Knowledge about AIDS among leaving certificate students. *Ir. Med. J.* March, 1990. Vol. 83. No. 1; 19 - 21.
21. Harkin AM; Hurley M. National Survey on public knowledge about AIDS in Ireland. *Health Education Bureau* 1988; 3: 25 - 29.
22. Powell B, Dockeray J, Swaine E. Unmarried mothers: a survey of 200 presenting for antenatal care. *Ir. Med. J.* 1982: 75, 248 - 9.
23. Condon F; Collins R, Jenkins D.M., Sexual & Contraceptive practice in an Irish University. *Ir. Med. J.* Nov. 1993. Vol. 86 No. 206 - 207.
24. Ketting E, The Dutch experience of teenage pregnancy - lessons for Wales, teenage pregnancy proceeding of a one-day international seminar in West Glamorgan in 1993. 26 - 29.
25. Aggleton P, Baldo P, Slutkin G, Sex education leads to safer behaviour, *Global AIDS News; WHO Global programme on AIDS* p. 1 - 2.
26. Dept. of Health - Shaping a healthier future. A strategy for effective health care in the 1990s. p. 49 and p. 66.