TITHE AN OIREACHTAIS

AN COMHCHOISTE UM GHNÓTHAÍ EALAÍON, SPÓIRT, TURASÓIREACHTA, POBAIL, TUAITHE AGUS GAELTACHTA

An Deichiú Tuarascáil

An méid is ceart a bheith ar eolas ag gach uile dhuine faoi Channabas

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HOUSES OF THE OIREACHTAS

JOINT COMMITTEE ON ARTS, SPORT, TOURISM, COMMUNITY, RURAL AND GAELTACHT AFFAIRS

Tenth Report

What Everyone should know about Cannabis

Iúil 2006
July 2006

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Acknowledgements

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FOREWORD BY THE CHAIRMAN

This is not so much a report as a reality check and you only have to read the four or five pages detailing some case histories of unfortunates who dabbled in supposedly “harmless” cannabis and the consequences for themselves and their families to see what I mean.

The title of the Report belies the serious nature of the subject. There is no room for manoeuvre here, no room for a so called liberal outlook as often espoused by those who aim to dismiss the effects of cannabis and certainly no room for those who profit from peddling it to our vulnerable and impressionable young people.

There has been much recent justified concern and indeed outrage at the preying on young people by sexual predators but do not be under any illusion: cannabis can be and in many cases is also a serious threat to our young people.

The report clearly shows a link between the use of cannabis and the onset of mental illness in young people at a time in their lives when they are already potentially at risk from the onset of psychological problems. Unborn children of young women who believe that cannabis is harmless are also very much at risk according to the latest research. When you accept that

mental illness is managed rather than cured you can see the appalling vista induced by indulgence in cannabis with the consequent increased vulnerability to schizophrenia, depression and bipolar disorder. The Members of the Joint Committee are convinced that the only attitude to cannabis should be – "noli tangere" or do not touch as the Romans used to say and that there should be no movement towards the liberalisation of the legal sanctions which attach to the possession of, use and dealing in this truly noxious weed. Finally the Joint Committee wish to see the full rigours of the law applied to those who benefit financially from trading in cannabis.

Cecilia Keaveney T.D.
Chairman
July 2006

Recommendations of the Joint Committee

As a first principle the Joint Committee regard cannabis as being as socially unacceptable as other harder drugs such as cocaine and heroin and those who profit from it should be pursued with the full rigour of the law.

1. Given that there are reliably estimated to be some 300,000 users of cannabis in the state and the stated consequences for their mental and physical health the Joint Committee strongly recommends that a national strategy be drawn up with the aim of reversing the exponential rise in cannabis use over the past decade. Particular emphasis must be paid to young women of childbearing age and their offspring and to young people in general given their vulnerability to mental health problems. There is now compelling evidence that cannabis alone can result in later development of psychotic illness.
2. The Joint Committee would like to see support for further neurobiological and clinical research to examine the long term cognitive impairment effects associated with heavy cannabis use, particularly those impairments relating to heavy use in adolescence and to prenatal exposure to cannabis.
3. The Joint Committee wishes to draw attention to the physical effects of cannabis use and wishes to point out that the health risks are greater than those for conventional tobacco (more carcinogens, higher tar content).
4. Given that the cannabis trade is worth more than €375 million and is the largest component of the vile drugs trade the Joint Committee urges that

greater resources be devoted to the criminal side and that there be a more pro-active pursuit of those who gain from it financially as is the case with the Class A drugs.

5. Awareness of the risks of cannabis use as portrayed in this report needs to be raised through public information campaigns focused particularly on young people and their parents and we need to understand that cannabis is primarily a health issue.

6. The Joint Committee recommends the adoption of prevention strategies where primary prevention attempts to reduce the number of new cases of cannabis use, where secondary prevention seeks to lower the rate of problem cannabis use and where tertiary prevention seeks to decrease the amount of disability associated with problem cannabis use.

7. The Joint Committee wish to see integrated treatment programmes for those with concurrent mental illness and substance abuse as individuals experiencing these disorders together face particular difficulty receiving diagnostic and treatment services although separately these disorders are treatable.

Appendix A

Consultants' Report and supporting material

What everyone should know about cannabis

Joint Committee on Arts, Sport, Tourism, Community, Rural & Gaeltacht Affairs

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Executive Summary

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- ***Executive Summary***

- Cannabis use is seen across the socio-economic spectrum and it is by far the most common illicit drug of dependence in English-speaking countries, including Ireland.

- Many people who use cannabis are unaware of the physical, psychological and social risks associated with its use.

- Both the use of and dealing in cannabis are criminal offences in Ireland.

- The cannabis market in Ireland is worth about €375million annually, this being more than the combined market for cocaine, heroin, ecstasy and amphetamines.

- Cannabis use by Irish people as they enter early adulthood is a relatively new phenomenon. Those who grew up in 1960s, 1970s and 1980s in Ireland, were much less likely to experiment with cannabis than those who passed through their teens in the past decade.

- It is estimated that there are in the region of 28,300 people in Ireland who are cannabis dependent.

- People who develop cannabis problems are heterogeneous. They do not fit neatly into stereotypes. There are many routes into cannabis dependence. Similarly, there are many routes away from problematic cannabis use.

- Irish teenagers are much more likely to use cannabis than their European counterparts and about 5000 (9%) of 16 year old school children in Ireland report using cannabis at least 3 times per month.

- Cannabis plays a part as a stepping stone to more serious drug use. In other words, it is rare for somebody to progress to heroin use or cocaine use without first having tried cannabis. However, most cannabis users never progress to using these other substances.

- The vast majority of Irish people (69%) disapprove of people smoking cannabis occasionally.

- Even if the cannabis law was liberalised, it is likely that under 18's will still need to be treated differently and their use accounts for a substantial proportion of the cannabis use that occurs in Ireland.

- There is four times as much tar in a cannabis joint compared to a regular cigarette. Cannabis smokers experience the same health problems as tobacco smokers, including bronchitis, emphysema, and lung cancer.

- Peak incidence of cannabis use coincides with the time of maximum risk of developing serious mental health problems i.e. late teens and early adulthood.

- Adolescent onset cannabis use leads to a four fold increase in the risk of developing schizophrenia.

- Early onset cannabis use increases the risk of subsequently attempting suicide and those who started using cannabis before age 17 had a lower percentage of cortical grey matter compared to those who started later in life.

- Third level students demonstrate particularly high rates of cannabis use. It seems likely that cannabis is a factor contributing to poor attainment and drop out by a sub-section of Irish Students.

- Widespread drunkenness and Ireland's tolerant attitude to alcohol intoxication provides cannabis users with a lot of 'camouflage'.

- Cannabis contributes to road traffic accidents, these being a major cause of mortality among young adults.

- What a parent thinks to be alcohol intoxication in their teenage children may in fact be alcohol plus cannabis, or cannabis alone. Parents probably need as much education, if not more, than their children about cannabis. Education which has an exclusive focus on children will have a limited impact.

- Heavy cannabis use among young females has begun to equal that of young males. This will pose distinct problems in pregnant female users with the potential for the emergence of a foetal cannabis syndrome as there is growing scientific evidence that cannabis use during pregnancy caries a risk of persistent neurocognitive changes in the newborn infants and neurobehavioural changes that emerge in childhood.

- Despite higher prevalence of cannabis use in the Dublin region, people from outside Dublin are much more likely to access treatment. This indicates a reluctance or inability of cannabis users in Dublin to access treatment. The uneven and insufficient treatment provision for cannabis dependence across Ireland is something which must be addressed.

- Individuals who enter treatment for cannabis abuse frequently cite the upset caused to the family and loved ones as the main reason for treatment seeking.

- The aims of specialist services for problem cannabis use include harm reduction; abstinence and relapse prevention.

- Evidence based treatment approaches for cannabis dependence include cognitive therapy and motivational interviewing. Family therapy has an important role in the treatment of adolescents.

- In view of the strong association between cannabis use and mental illness and the fact that mental health professionals have the required skills to provide evidence based treatment for cannabis addiction, the logical location for provision of treatment is within mental health services.

- There has never been a cannabis awareness campaign in Ireland. Education regarding cannabis is required across society and should not be exclusively focused on teenagers or schools. Indeed, teenagers are probably better informed about the risks and consequences of cannabis use than are their parents.

2. General Facts

2.1 What is cannabis?

Cannabis sativa and *cannabis indica* are members of the nettle family that have grown wild throughout the world for centuries. Both plants have been used for a variety of purposes including in the manufacture of hemp to make rope and textiles, as a medicinal herb and as the popular recreational drug - cannabis or marijuana, terms that are often used interchangeably. The plant is used as:

- The resin - a brown/black lump, known as *bhang*, *ganja*, *hashish*, etc;

- The dried leaves - known as *grass*, *marijuana*, *spliff*, *weed* etc.

Skunk is a new, stronger type of cannabis. There are around 100 varieties of this and it is named after the pungent smell it gives off during growing. It is normally homegrown, either under grow lights or in a greenhouse, often using hydroponic (growing in nutrient rich liquids rather than soil) techniques.
Both traditional cannabis and *skunk* come in a wide variety of strengths, so it is usually not possible to judge exactly what is being used in any one particular session.

There has been growing concerns regarding cannabis potency. It is still unknown whether those who smoke higher potency cannabis have higher blood levels of THC[1] or whether they titrate the dose according to the subjective and relatively immediate pharmacological effects. The relationship between potency, dose and consequent problems is still poorly understood. An increasing body of work has noted the association between the use of cannabis and the development of mental health problems such as psychosis, depression and schizophrenia, especially in those with pre-existing vulnerability. Here, however, exposure to the drug over time is likely to be the most important factor rather than potency of cannabis consumed in any one individual session of use (King *et al,* 2005).

[1] THC - tetrahydrocannabinol, the most psychoactive agent extracted from the cannabis plant

2.2 How is it cannabis used?

Most commonly, the resin or the dried leaves are mixed with tobacco and smoked as a *spliff* or *joint*. The smoke is inhaled strongly and held in the lungs for a number of seconds. It can also be smoked in a pipe or collected in a container before inhaling it. It can be brewed as tea or baked in cakes, and ingested.
More than half of its psychologically active chemical ingredient, 1, 9-tetrahydrocannabinol (9-THC), is absorbed into the blood when smoked. 9-THC tends to build up in fatty tissues throughout the body and so takes a long time to be excreted in the urine. As a result cannabis can be detected in urine up to 56 days after it has last been used.

2.3 What are the risks of cannabis use?

There appears to be a poor general understanding of the risks of cannabis use. In a recent Swiss study neither younger (12-15 year old) adolescents, older (16-19 year old) adolescents, parents of teenagers and professionals working with young people, had any consensual vision of the risks of cannabis use or the definition of misuse. In the area of the prevention of cannabis use/misuse, while parents focused on the potential role of professionals and the media, thus minimizing their own educational and preventive role, professionals stressed the importance of parental responsibility for control and education. So that in reality parents were leaving it up to professionals and professionals working with young people were leaving education and awareness-raising to parents. This suggests an urgent need for information and clarification of the issues linked with cannabis use and misuse directed at parents, professionals and young people (Menghrajani *et al,* 2005).

Case History:

Seán was a rather shy 14 year old who was introduced to cannabis by some school friends. He found that smoking helped him to relax, and over time began to rely on cannabis to help him feel part of the gang. His parents were tolerant of cannabis use being of the view that this was a harmless recreational habit. After passing his Junior Cert, Seán's parents began to notice that he had become progressively more withdrawn culminating with his revealing a wide range of suspicions to his parents about his classmates, teachers and strangers on the street. A referral to a psychiatrist followed.

2.4 Is cannabis addictive?

Cannabis has some of the features of addictive drugs such as: tolerance – having to take more and more over time to get the same effect. There is growing evidence that regular cannabis users experience withdrawal symptoms when they stop using (Vandrey et al, 2005).

2.5 How easy is it to become dependent on cannabis?

The risk of becoming cannabis dependent within 24 months after first use of cannabis was assessed using the information from the National Household Survey on Drug Abuse conducted during 2000-2001, with a representative sample of 114,241 residents of the USA aged 12 and older. A total of 3,352 respondents were found to have used cannabis for the first time within a span of up to 24 months prior to assessment. An estimated 3.9% of these recent-onset users developed a cannabis dependence syndrome during the interval since first use (median interval duration ~12 months). Excess risk of cannabis dependence was found for those with cannabis onset before late-adolescence, those with family income less than US$ 20,000, and those who had used three or more drugs before the first use of cannabis (i.e., tobacco, alcohol, and other drugs). This study's focus on recent-onset users more closely approximates prospective and longitudinal research on the incidence (risk) of becoming cannabis dependent soon after onset of cannabis use, removing the influence of users with long-sustained or persistent cannabis dependence developed years ago (Chen *et al,* 2005).

2.6 What is the extent of the cannabis problem?

Cannabis is by far the most common illicit drug of dependence in English-speaking countries (Hall *et al,* 1999). The Australian National Survey of Mental Health and Well-being reported that among those using cannabis on at least five occasions in the previous year, 23.3% met ICD-10[2] criteria for a current cannabis use disorder (Hall *et al,* 1998). These Australian rates of current cannabis disorder are even higher than the U.S. National Co-morbidity Study, which found that 9.2% of those who reported any lifetime use of cannabis developed dependence as measured by DSM-III-R criteria[3] (Anthony *et al,* 1994).

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[2] ICD-10. The International Classification of Diseases, Version 10. Geneva: WHO, 1994.

[3] DSM -111-R. The Diagnostic and Statistical Manual of Mental Disorders, third edition (revised). Washington: American Psychiatric Association, 1987.

Along with the growing recognition of the range of potential cannabis-related harms (Kalant *et al,* 1999), there is an increasing demand for treatment.

2.7 What factors influence dependence and outcome?

Social influences are important in terms of prevention and interventions (Chabrol *et al,* 2005). The number of one's peers using cannabis is a risk factor whereas the number of peers opposed to cannabis use is a protective factor.

Education can affect the lives of adolescents by reinforcing healthy choices and promoting a healthy lifestyle. However, difficulties experienced in the school and family environments may interfere with these goals. This may be particularly true for those youth already participating in health-compromising behaviors such as drug use. Of course, patterns of drug use take many forms, and some are more serious than others. Youth using cannabis at more intensive levels have often been overlooked in the literature. Butters (2005) addressed this gap by examining the effects of individual and cumulative school and family factors on not only the probability of any cannabis use but also the progression to problem use among almost 2000 Ontario students. The results suggested that disrupted family structure increased the likelihood of cannabis use in general. However, patterns of problem use were displayed among youth experiencing problems in school and poor family relationships. As anticipated, adolescents experiencing multiple school and family factors were also significantly more likely to engage in cannabis use, and in its more serious form, when controlling for other demographic predictors. This has implications for health promotion initiatives in schools.

Data from 552 adolescents (aged 12-18; 82% male) with cannabis abuse or dependence, who participated in outpatient treatment, indicated that environmental factors of family conflict, family cohesion, and social support indirectly predicted substance use and substance-related problems as mediated by recovery environment and social risk. These results support the idea of targeting environmental factors during treatment as a way of improving outcomes for adolescents with cannabis disorders (Godley *et al,* 2005).

2.8 What are the common problems associated with cannabis use?

Many – perhaps most – people who use cannabis have no complaints. Most are unaware of the risks associated with use but for some, it can become a problem. A US organization *marijuanaanonymous.org* defines the problems of cannabis as: “if marijuana controls our lives and our

thinking, and if our desires center around marijuana - scoring it, dealing it, and finding ways to stay high so that they lose interest in all else." Their website carries the following questionnaire – which could equally well apply to alcohol use or any other drug.

"If you answer 'Yes' to any of the questions, you may have a problem.

1. Has smoking *pot* stopped being fun?
2. Do you ever get *high* alone?
3. Is it hard for you to imagine a life without marijuana?
4. Do you find that your friends are determined by your marijuana use?
5. Do you smoke marijuana to avoid dealing with your problems?
6. Do you smoke *pot* to cope with your feelings?
7. Does your marijuana use let you live in a privately defined world?
8. Have you ever failed to keep promises you made about cutting down or controlling your *dope* smoking?
9. Has marijuana caused problems with memory, concentration, or motivation?
10. When your *stash* is nearly empty, do you feel anxious or worried about how to get more?
11. Do you plan your life around your marijuana use?
12. Have friends or relatives ever complained that your *pot* smoking is damaging your relationship with them?"

2.9 What about reducing cannabis use?

The Home Office in Britain recently published a guide on how to cut down and stop cannabis use (*www.homeoffice.gov.uk/materials/kc-stop.pdf*). Once the decision is made to give up cannabis, it may be no more difficult than giving up cigarettes. It suggests a range of things a person can do to successfully stop using, including:

- Drawing up a list of reasons for wanting to change
- Planning how the person will change
- Thinking about coping with withdrawal symptoms, and
- Having a back-up plan.

2.10 What do-it-yourself strategies are there for giving up cannabis?

Many people will be able to stop on their own. The website www.talktofrank.com is helpful for someone wishing to give up cannabis on a do it yourself basis using the information on this website. There are also on-line support groups available e.g.*www.marijuanaanonymous.org.* or *www.connexions.gov.uk* that is a UK-based website for 13-19 year olds, which offers support and can put individuals in touch with a practitioner or personal adviser. A person who wants to give up

cannabis use but who feels unable to do so may seek help from their GP and they can also be referred on to more specialist services.

3. Epidemiology

3.1 The Journey from Experimentation to Dependence

Some people will decide to experiment with drugs, most typically during their teenage years or in early adulthood. Many of those who experiment with a substance will quickly decide to stop, their curiosity being satisfied. However, a proportion of those who experiment will continue to use infrequently over the coming months and years. Some of those who continue to use a substance will become quite regular users. Of those who become regular users, a subset will become problematic or dependent users of the substance. This potential progression from first experimentation to dependence is seen in all drugs, including cigarettes, alcohol, heroin and cannabis.

With regard to cannabis in Ireland, a number of epidemiological studies provide insights into the proportion of people who experiment and the proportion that move from experimentation to more problematic patterns of regular use.

3.2 Young Children

There has been very little research regarding the use of cannabis by young children. The Health Behaviour In School-age Children (HBSC) study found that 1-2% of Irish 10 – 12 year olds reported past cannabis use (Kelleher *et al,* 2003).

A study was recently conducted in Glasgow examining 10 – 12 year olds (McIntosh *et al* 2004). This study found that 10% of children in this age range had been offered cannabis. About a quarter had been in the company of others who were using cannabis. While the study was not conducted in Ireland, there is no reason to believe that the situation in large urban centres in Ireland would be any different, given the fact that the profile of cannabis use in Scottish teenagers and Scottish adults is quite similar to that seen in urban settings in Ireland.

3.3 Teenagers.

3.3.1 *Frequency of Experimentation & Regular Use*

There is substantial epidemiological evidence regarding the extent of cannabis use among Irish teenagers. This data is made more interesting by the fact that it has been collected over the past decade, making evaluation of temporal trends possible. The European School Survey

Project on Alcohol and Drugs (ESPAD) study was conducted in 1995, 1999 and most recently in 2003 (Hibell *et al,* 1996; Hibell *et al*, 2000; Hibell *et al*, 2004). These studies looked at 16-year-old school children in 30 countries across Europe. Students were asked about their past use of and attitudes towards a range of legal and illegal substances, including cannabis. The ESPAD study indicates that Irish teenagers are much more likely to use cannabis than their European counterparts (See figures 1, 2 & 3). In the most recent ESPAD study, it emerged that 38% of Irish 16 year olds have used cannabis at least once, with 6% reporting cannabis use on at least 40 occasions. Thirty per cent of Irish 16 year olds say that they have used cannabis in the last year with 16% reporting use in the last month. Nine per cent (i.e. 5,000) of 16 year old school children report using cannabis at least 3 times in the last month (Hibell *et al,* 2004). While males demonstrated higher rates of self reported cannabis use in the earlier ESPAD studies, the reported rates of occasional and heavy use of cannabis by 16 year old school girls in Ireland is equal to that demonstrated by the 16 year old boys in the 2003 study. The HBSC study found similar rates of self reported cannabis use (Kelleher *et al*, 2003).

Figure 1. Cannabis use in the past year reported by 16 year old school children in the ESPAD studies

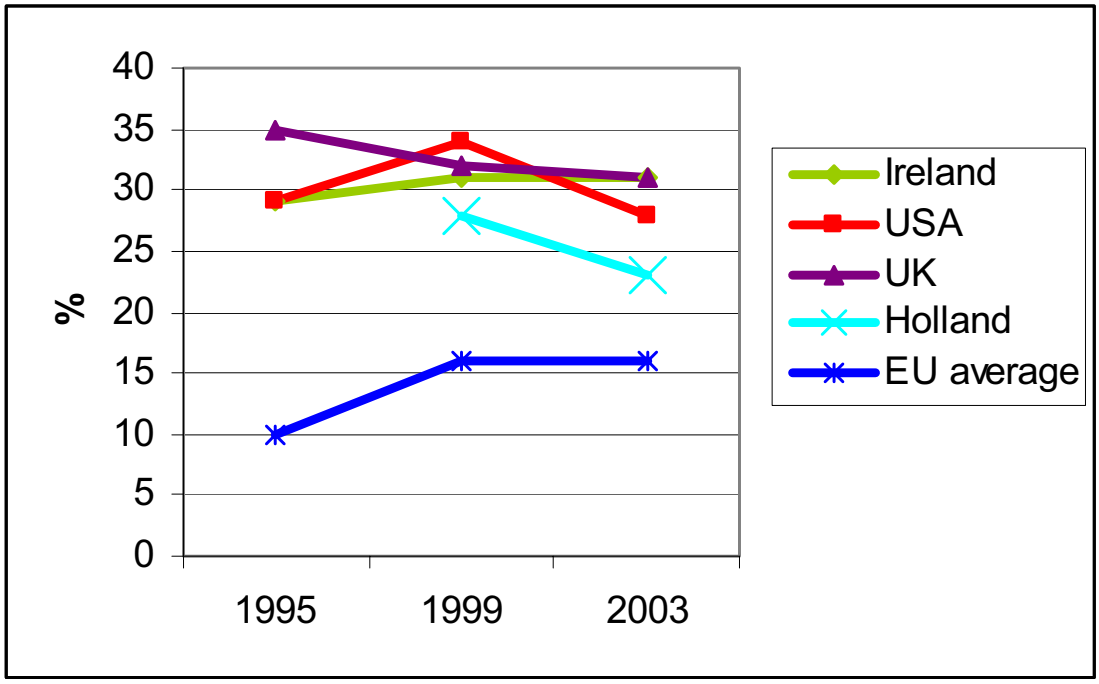


Figure 2. ESPAD - 16 year old schoolchildren - Use of cannabis in the past month

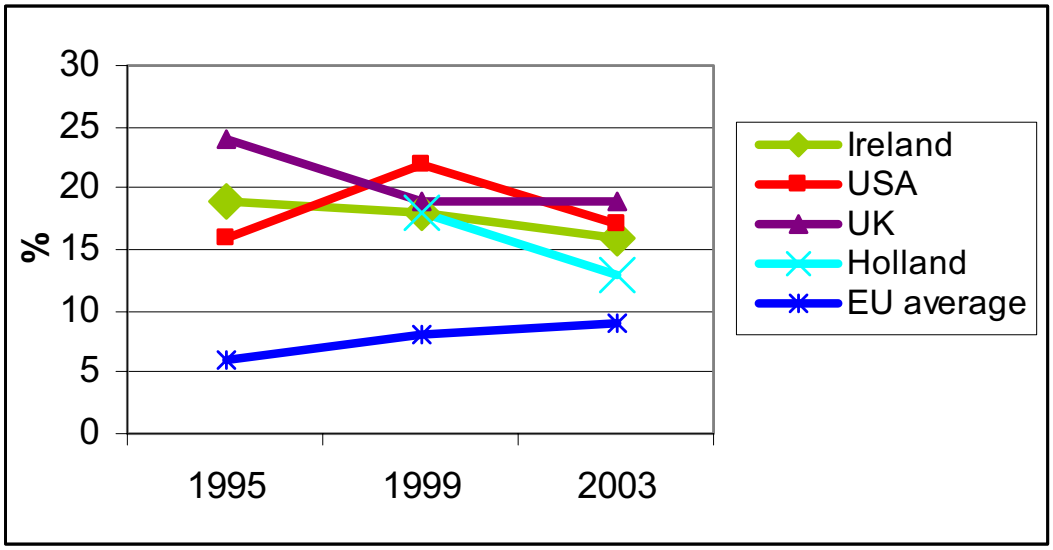
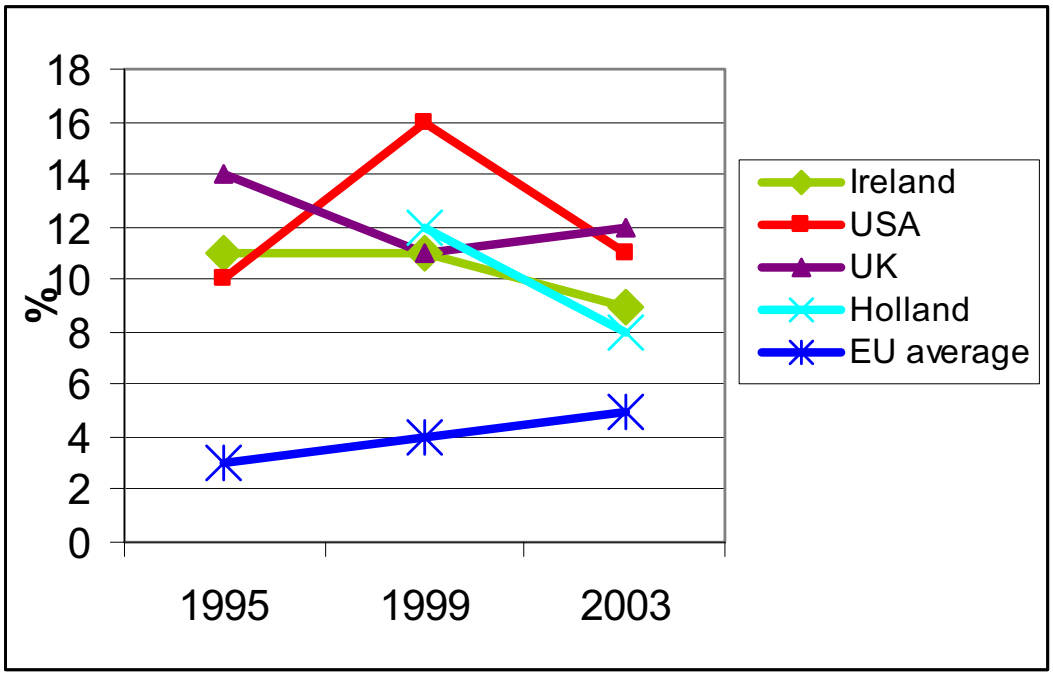


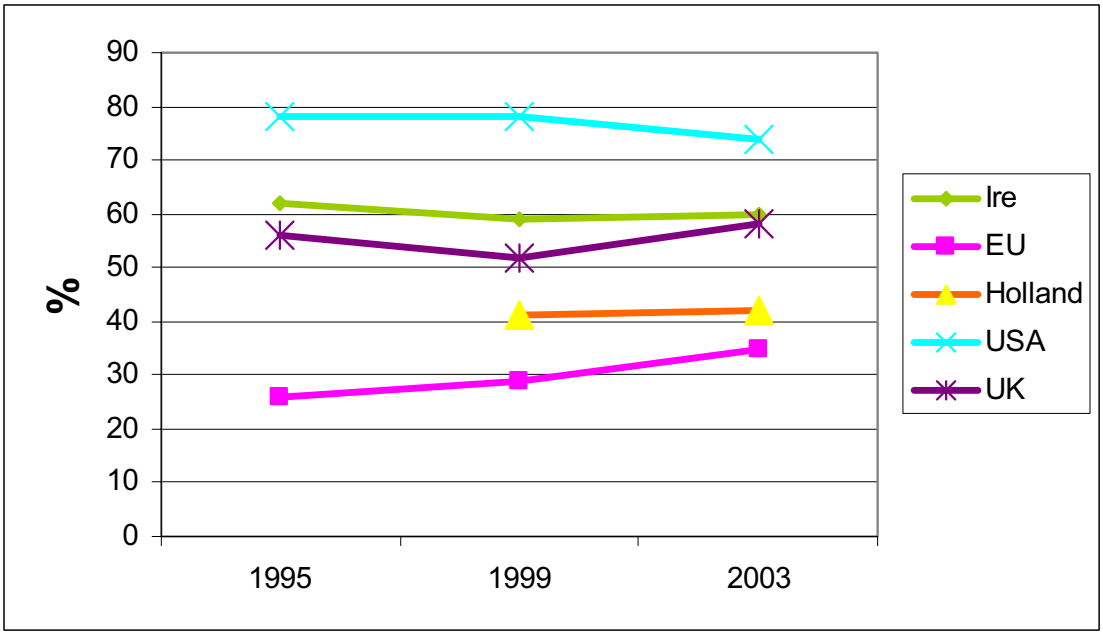
Figure 3. ESPAD - 16 year old schoolchildren across Europe and the USA- Heavy cannabis users (3+ times in past month)



3.3.2 Context of First Use & Availability

Cannabis was the first drug used in 97% of cases where illicit drug use was reported (Hibell *et al*, 2004). Generally, this first introduction to cannabis occurred in a social context with friends or an older sibling. Only 5% of those who had used cannabis reported that their first use was provided by anyone other than a friend. Twenty per cent of the schoolchildren who had used cannabis did so before their 14th birthday. Unfortunately, Irish teenagers perceive cannabis to be more easily available than any of their European counterparts (See Figure 4). Thirty per cent indicated that cannabis was easily available in their school, this being double the European average for that particular setting. In general, 60% of Irish 16 year olds reported that cannabis was very or fairly easy to obtain. Again, the European average response to this particular question was just 35%.

Figure 4. ESPAD - 16 year old schoolchildren's' perception that cannabis is very or fairly available



3.3.3 Perceived danger in Cannabis Use

Students were also asked whether or not they perceived cannabis use to be of great risk to their health. Students differentiated between cannabis use once or twice only versus regular use, as 54% perceived regular use to be a great risk. Only 15% perceived use on one or two occasions to be of great risk. They perceived substantially less risk than their European

counterparts, with the corresponding average figures across Europe being 70% and 32% for these two questions.

3.3.4 Disapproval of Cannabis Use

The earlier 1999 ESPAD study had included an additional question regarding the disapproval of substance use. The 16 year olds were asked whether they would disapprove of someone using cannabis on one or two occasions. Fifty-seven per cent of Irish students reported disapproval of cannabis experimentation. In most other European countries many more teenagers disapproved of this behaviour, with the average being 69%. Across Europe there tends to be an inverse relationship between disapproval of cannabis use and the actual rates of regular cannabis use. In other words countries with high rates of disapproval of use demonstrated low rates of actual use. Correspondingly, countries such as Ireland, which had relatively low rates of disapproval of use had the highest rates of actual regular use.

3.4 Third Level Students.

The College Lifestyle and Attitudinal National (CLAN) Study was conducted in 2002 and 2003 among third level students in Ireland (Hope *et al,* 2005). Their average age was 21 years at the time of interview. Thirty seven percent reported cannabis use in the past year. Fifteen percent reported cannabis use at least 10 times in the past year. Twenty percent reported cannabis use in the past month. Regular cannabis use (at least 10 times in the past month) was reported by 9% of males and 3% of females. These rates of use in the past year, past month and heavy use are marginally greater than those seen in the 2003 ESPAD study of Irish 16 year olds. Although there is a substantial gender difference seen among the 21 year olds in this CLAN study, it seems that this reflects the patterns of cannabis use which would have been seen among Irish 16 year olds in the mid to late 1990's, where heavy cannabis use was much more common in young males (Hibell *et al,* 1996; Hibell *et al,* 2000). It is likely that the findings from the ESPAD study 2003, which showed rates of heavy cannabis use among young girls equaling that of young boys, may well persist into early adulthood (Hibell *et al,* 2004). Consequently, we predict that if the CLAN study is repeated in 2008, by the time this cohort reaches 21 years, there will be as many females as males reporting heavy cannabis use. This will result in a rise in the prevalence of heavy cannabis use at the population level.

3.5 Adults

3.5.1 NACD Study of Drug Prevalence in Ireland

The National Advisory Committee on Drugs conducted a large population study on drug use in 2002. This involved face to face interviews with almost 5000 people aged between 15 years and 65 years. It is worth noting that the methodology in this study is different than in the previously mentioned studies (ESPAD, HBSC and CLAN), where anonymous questionnaires were completed by study participants. The results specific to cannabis were recently published (NACD, 2005a). Of the 4,900 people interviewed, just over 17% reported some past use of cannabis, with males being almost twice as likely to report such use. Lifetime exposure to cannabis was substantially higher in younger adults aged 15 – 34 years (24% compared to adults over 35 years 11%). This mirrors findings from earlier research and confirms the fact that cannabis use by Irish people as they enter early adulthood is a relatively new phenomenon (Bryan *et al,* 2000). Those who grew up in 1960s, 1970s and 1980s in Ireland, were much less likely to experiment with cannabis than the cohort who passed through their teens in the past decade.

The last year prevalence was 5% in the overall population and the last month prevalence was 2.6%. The rates of recent use seen in young adults less than 35 years old were about 4-5 times those seen in older adults. Among those who reported use in the past month, 40% had only used on a couple of occasions while 22% were using on an almost daily basis. This indicates that about 1% of young people aged 15 years – 34 years in Ireland report using cannabis on an almost daily basis.

3.5.2 Higher rates of use in College Students and Graduates

In an examination of the relationship between cannabis and work status, students were much more likely to smoke cannabis in the last year or the last month, when compared to those in work and those who were unemployed. Linked to this, there is a trend seen across the population for an escalation in rates of both past and recent cannabis use when individuals were ranked by educational level attained, with the highest rates of use seen in those who had attained a third level qualification.

The relationship between cannabis use and the socio-economic group was complex. Use tended to peak in the middle socio- economic groups.

3.5.3 Patterns of use among recent cannabis users

The people who reported using cannabis in the last month were asked what type of cannabis they had used. Seventy-nine per cent reported use of hash (or cannabis resin) while 26% reported some use of grass or weed. The vast majority of cannabis users consumed it by smoking it in a joint. Seven per cent reported use of a pipe while 6% reported use of a bong. Just over 3% reported eating some cannabis in the past month.

People who had consumed cannabis in the last month were also asked where they had obtained the cannabis on the last occasion of use. Among these individuals, 79% said that cannabis was very easy or fairly easy to obtain. The vast majority (70%) reported that they bought it from or were given it by friends or family. Only 16% indicated that they had bought it from a contact that was not known personally to them. Most people (57%) reported that they were in the house of a friend when they last used cannabis. One fifth were in a disco, bar or club. One per cent ordered by phone and 7% went to the house of a dealer.

3.5.4 Regular Users

It emerged that 73% of the people who tried cannabis never developed a pattern of regular use. On the other hand, 27% of users reported that they had a pattern of regular use either currently or at sometime in the past. Fifty-eight per cent of these had stopped their cannabis use, 12% tried to stop but failed and 30% of these regular users had never tried to stop.

Past regular cannabis users were given a variety of possible factors to choose from regarding their reason(s) for stopping cannabis use. The most commonly cited reason (43%) was that they "did not want to take it anymore". One in four reported that it was no longer part of their social life, while 23% reported that they did not enjoy the after effects. Twenty per cent developed health concerns and 11% indicated that they were persuaded to curtail their use following pressure from friends and family. Cost was a factor of just 8% of individuals, while impact on job, family or friends was cited also by 8%. Twenty percent of women who had been regular smokers stopped as a result of pregnancy. Unfortunately interviewees were not asked whether or not the legality of cannabis use or any criminal justice concerns or consequences, contributed to their decision to discontinue regular use.

3.5.5 Geographical variation

The NACD study looked at prevalence of cannabis use in the different health board regions of Ireland. The last year prevalence of cannabis use

was higher in the region around Dublin, ranging from 10 to 12.6 %. In the health board areas outside of Dublin, the corresponding figure varied from 10.6% in the North East to a low of 3.9% in the North West. An earlier nationwide population survey had found a rates of lifetime cannabis use in rural settings to be two-thirds those seen in urban settings (Bryan *et al,* 2000).

3.6 Cannabis Dependence.

Contrary to popular opinion, people can become dependent upon cannabis (Vandrey *et al,* 2005). Unfortunately there has been no large-scale Irish study to measure cannabis dependence. Internationally, it has been observed that about 10% of those using cannabis are dependent upon it (Kandel *et al,* 1997). Consequently based upon the various epidemiological studies outlined above, which indicate that about 30% of 15 – 24 year olds have used cannabis in the past year (192,500 people), we estimate that 3% of people in this age group (19,250) are dependent upon cannabis, based on Irish population reports from the 2002 census. Cannabis use is lower in older age ranges but it seems likely that about 1% of people aged between 26 years and 35 years (6,150) are dependent on cannabis, based on an estimate of about 10% of those using cannabis in the last year. Based on the NACD Study, which found that just 2% of people over the age of 35 years had used cannabis in the past year, we estimate that about 0.2% of people aged between 35 years and 64 years are cannabis dependent (2,900). Based on these figures, we estimate that the population of people in Ireland who are cannabis dependent to be in the region of 28,300. It is these individuals who are most likely to encounter the various physical, psychological and social harms outlined elsewhere in this report.

3.7 Factors Associated With Increased And Decreased Risk Of Cannabis Initiation And Cannabis Dependence.

Research indicates that some individuals are more likely to develop problematic patterns of cannabis use. Risk and protective factors have been identified at the individual level, family level and the wider community or societal level. It is important to note that people who have no individual, family or community risk factors may still develop cannabis problems. Similarly, many individuals who appear to have almost every individual and family risk factor will not develop problematic cannabis use.

3.7.1 Characteristics of the Individual

Individual risk factors include a history of conduct disorder and poor attachment to parents and community. Young people with lower IQ and difficulties in the area of social and communication skills are also more vulnerable to drifting into patterns of cannabis abuse. Children who smoke cigarettes and begin drinking alcohol at an early age are more likely to progress to cannabis use. Early onset of cannabis use is associated with greater risk of dependence in adulthood. Children who demonstrate a characteristic of temperament known as sensation seeking are also more at risk (Gilvarry, 1999). The NACD prevalence and CLAN studies outlined above indicate that third level students are more likely to use cannabis than same aged groups of the general population (NACD, 2005a).

3.7.1.1 'Peer Pressure' and Peer Influence

Peer pressure is regularly mentioned as a factor causing cannabis use. However, the most frequently cited reason by teenagers for first experimenting with cannabis is curiosity. Peer pressure or "not wanting to feel left out" is cited by less than 10% (Hibell *et al,* 2003). It is important to bear in mind that peer influence can be both positive and negative. Whether or not this influence is positive or negative will depend on the attitude of ones peers. As mentioned above, the majority of Irish 16 year olds surveyed in 1999 actually disapproved of cannabis use (Hibell *et al,* 2000). Consequently teenagers who socialise with peers who disapprove of cannabis use are likely to be kept "on the straight and narrow" and avoid cannabis use due to the peer pressure. However teenagers who drift into the company of peers who approve of cannabis use are subsequently more likely to develop patterns of use themselves.

3.7.1.2 Complex impact of Self-Esteem

Self-esteem is also frequently cited as a risk factor for the development for cannabis and other drug problems, particularly during adolescence. Recent research indicates the complexity of the relationship between self-esteem and drug use. It appears to be the case that children with higher self-esteem are more likely to experiment with drugs such as cannabis than their counterparts with lower self-esteem (Ashton, 2004). However, among those who do progress to experimentation and occasional cannabis use, it is those with lower self-esteem who may to be more at risk of progressing to patterns of problematic or dependent use.

3.7.2 Family factors

There are a number of family factors that have been identified as increasing and decreasing the risk of a young person developing

cannabis abuse (Gilvarry, 1999). The risk factors include parental drug or alcohol abuse and a tolerant attitude to cannabis use and intoxication by parents. Where children experience a style of parenting that is perceived to be critical and harsh, they are more likely to develop problematic patterns of cannabis use. Where parenting involves poor supervision, a lack of clear rules or insufficient monitoring of these rules, the risk of teenagers abusing cannabis escalates (McIntosh *et al,* 2004). People who grow up in families where violence is commonplace seem more likely to develop patterns of cannabis use.

Protective family factors include the existence of clear rules which are adequately monitored and enforced. Young people with a positive attachment to at least one parent are less likely to develop substance abuse problems.

Case History

Edward is fifteen and has been smoking cannabis most evenings for the past year. He has been taking 'speed' (amphetamine) with some friends at weekends. His mother is aware of his cannabis smoking and is very worried about it. They have been getting into lots of arguments about both his drug use and the fact that he stays out so late at night. His father thinks that Edward is treating the family home as 'a hotel' and they frequently end up shouting at one another. His father has said that he would 'kick him out of the house' if he ever used a drug. For this reason, his mother has agreed not to tell his father about the cannabis smoking.

He has just completed his Junior Cert and has obtained seven honours. He is well liked by peers and teachers. He hopes to go to college after his Leaving Cert. He works in the local shop three evenings a week for pocket money.

Everyone is getting very frustrated with the situation at home but Edward doesn't see any substantial problem with his drug use. He thinks that alcohol is a much nastier substance than cannabis. He has seen the way his parents row with one another when they are drunk. He thinks his father is a hypocrite and stupid to be spending most of Saturday and Sunday lying in bed recovering from a hangover.

Edward has been very close to his mother in the past and he hates the fact that she is upset and worried about his drug use. After their arguments, he feels very guilty. He usually then either goes to his room or goes out to his friends. When feeling down, he likes to smoke a joint in order to 'switch off'.

3.7.3 Societal factors

There a number of societal factors that may also be influence the gradual escalation of cannabis use seen in Ireland over the past number of decades. Firstly, Ireland has an unusual attitude to intoxication by international standards. Drunkenness is not just tolerated but actively sought after and even admired in many sectors of Irish society. In contrast drunkenness is something to be ashamed off and apologised for in many European cultures, particularly those in the Mediterranean region. The majority of Irish men binge on any given drinking occasion (Ramstedt & Hope, 2005). It is now the case that young people have a broader menu of intoxicants to choose from than was previously the case in Ireland. Cannabis is readily available as indicated in the various studies of the general population and schoolchildren outlined above (Hibell *et al*, 2003; NACD, 2005). Some young people are clearly choosing cannabis as an alternative intoxicant with or instead of alcohol. The high prevalence of intoxication in Irish social settings provides people who abuse drugs including cannabis with a lot of camouflage, making their own intoxicated state less noticeable and more socially acceptable.

As a society, Ireland has enthusiastically embraced capitalism and consumerism over the last decade. A cornerstone of consumerism, fuelled by relentless advertising, is the encouragement of the individual to indulge in the moment, to avoid postponing pleasure and to ignore long term negative consequences in favour of the short-term benefit of the product that is on offer. Against this backdrop, it is not surprising that more young people are choosing to ignore the longer term risks that are associated with drug use and instead, they are choosing to seek out the pleasurable, but short-lived hedonic effects that are associated with drug use.

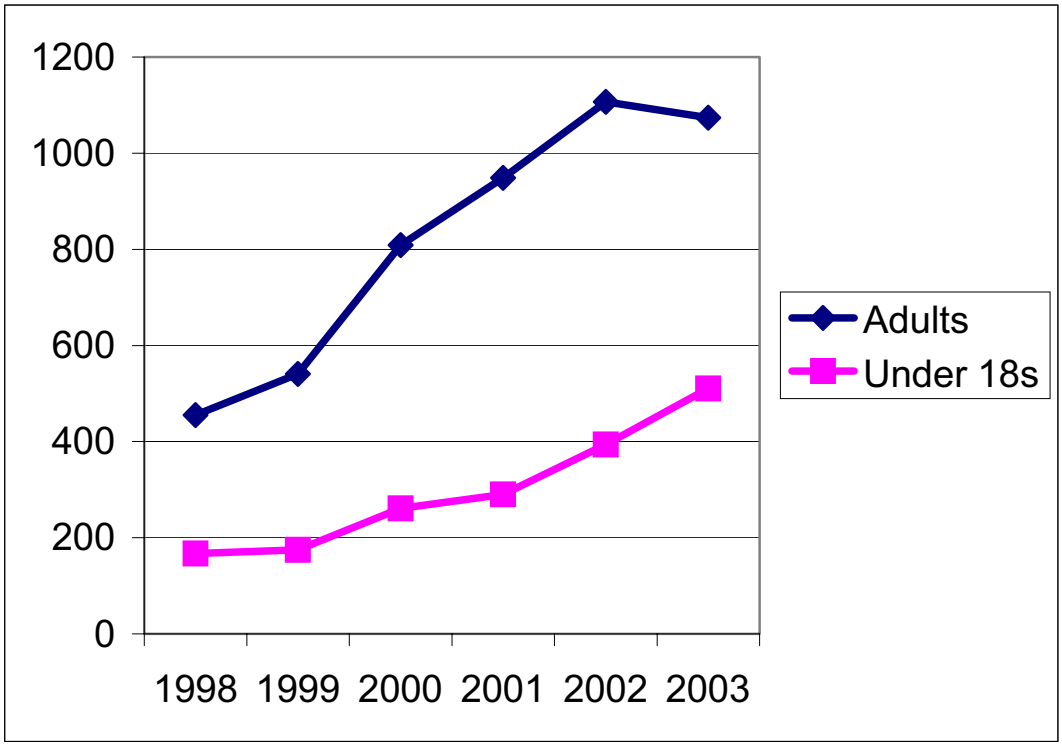
The criminal justice response to cannabis is inevitably an influence over cannabis use. The extent of this influence is open to substantial debate. Those who argue for a liberalisation in the law suggest it has a minimal influence in reducing demand (Runciman, 1999; Wodak *et al,* 2002). Following the reclassification of cannabis from a class B to a class C drug, the Advisory Council on the Misuse of Drugs (2005) concluded that there was no increase in cannabis use in the UK population. Those who are enthusiastic regarding the criminalisation of cannabis argue that it has a substantial deterrent effect on use. This remains to be proven, and is discussed in more detail elsewhere in this report (see discussion on British Cannabis Policy, section 4.3). Research examining the factors why young people who have access to cannabis and choose not to use it, would be helpful in this regard. Similarly the influences of criminal justice issues in causing some young people who have experimented with cannabis to discontinue use are worth examining.

It is also important to note that the use of intoxicating substances across Europe varies greatly from culture to culture, despite substantial similarities in the criminal justice responses and indeed the regulation around these substances. For example, with regard to alcohol, public order offences, drunkenness and alcohol abuse are commonplace in Ireland while countries with a more relaxed regulation demonstrate patterns of lesser use. It does seem likely that the dominant influence on patterns of use of mood altering substances, such as alcohol and cannabis, relate much more to societal attitudes to use and abuse of these substances rather than simply the criminal justice response.

3.8 Treatment Attendance

The numbers of people seeking and obtaining addiction treatment for a drug problem where cannabis was either the primary drug or a secondary drug has more than doubled in Ireland from 1998 to 2002, rising from 1938 people to 4171 (DMRD, 2005). Figure 5 outlines the number of attendances for primary cannabis abuse/dependence. Children are accounting for a growing proportion of these treatment contacts rising from less than one in four cases in the 1990s to one in three of those treated in 2003.

Figure 5. Numbers accessing addiction treatment for a primary cannabis problem, by age-group, 1998-2003. (Unpublished data from the National Drug Treatment Reporting System[4])



The NACD Prevalence Study found higher rates of cannabis use in the greater Dublin area (Dublin, Kildare, Wicklow) compared to the southern counties of Cork, Kerry, Waterford, Tipperary South, Wexford, Carlow & Kilkenny (NACD, 2005b). The population of the greater Dublin area is about 40% greater than that in these combined southern counties (Census 2002). Consequently, one would anticipate that the greater Dublin region would account for a greater proportion of the national cannabis treatment attendances. However, it emerged that only 165 people obtained treatment for cannabis abuse in the greater Dublin area during 2003. This compares to a figure of 860 people accessing cannabis treatment from these southern counties (unpublished data from the National Drug Treatment Reporting System). The numbers of people seeking and obtaining addiction treatment for a drug problem where cannabis was either the primary drug or a secondary drug has escalated substantially in Ireland during the period 1998 – 2002, rising from 1938 people in 1998 to 4171 in 2002 (DMRD, 2005). Despite the facts that the NACD Prevalence Study indicated higher rates of cannabis use in Dublin and that one quarter of the Irish population lives in Dublin, the Dublin region only accounted for 10% of the actual number of incident

[4] Health Research Board

treatment episodes for primary cannabis abuse in Ireland (DMRD, 2004). This indicates one of two possibilities. The first of these is that cannabis users in Dublin do not perceive problems associated with cannabis to be of such a severity to cause them to seek treatment. The second, and more likely possibility, relates to the fact that the treatment services in Dublin for addiction are currently focused primarily on managing opiate dependence. Consequently people who have cannabis problems are unlikely to seek treatment in these locations, possibly perceiving the service to be irrelevant to their particular needs. The uneven and insufficient treatment provision for cannabis dependence across Ireland is something which must be addressed.

Case History

Alan played music with a group and smoked cannabis after playing gigs. His friends noticed his increased moodiness, unreliability and irritability eventually dropping him from the group. Alan dropped the occasional Ecstasy tablet and over time experimented with cocaine and heroin. To fund his drug habit, he began engaging in some dealing. He became alienated from his family of origin from whom he had stolen and he developed Hepatitis C. He attended his local drug treatment centre and was put on a Methadone Maintenance Programme. He continues to smoke cannabis and spends most days lying on the sofa watching daytime TV.

4. Cannabis policy - Ireland & Abroad

4.1 Introduction

International laws governing substances strive to balance individual freedoms, individual's risk to their own health and the potential for harm to the wider society from such substance use. Illicit drugs tend to be classified on the basis of their harmfulness to individuals and society, deeming those in the higher classes e.g. cocaine or heroin because of their being most harmful and consequently also attracting more severe penalties and sanctions. The social and legal status of cannabis cannot be determined solely by claims and counterclaims on health grounds. One of the key determinants of the legal status of cannabis is likely to be the social and moral attitudes to a range of psychoactive substances and the anxiety that some patterns of social behaviour are strongly linked to its use (Farrell & Ritson, 2001).

Cannabis is the most widely trafficked drug globally. In Ireland, as in most other countries, there are more seizures of cannabis than of any other drug. Garda figures show a steady increase in the total number of cannabis-related offences in recent years and in 2005, cannabis-related seizures accounted for 57% of the total number of drug seizures. According to the Annual Report of An Garda Síochána (2005) cannabis-related offences accounted for 54 per % of the total number of drug offences in which criminal proceedings commenced.

4.2 Legal framework in Ireland

In Ireland, the Misuse of Drugs Act, 1977, *Section 3* makes it an offence for a person to have a controlled drug in his possession. However a graded scale of penalties exists for cannabis relative to other drugs as is evidenced by the proscribed fines and sentences under the Act. *Section 27* of the Act as amended by *Section 6* of the Criminal Justice Act, 1984 specifies that where the relevant controlled drug possessed by the individual is cannabis and when it can be proven to the satisfaction of the Court that this is for the individual's own use, the penalty should be a fine on the first offence up to a maximum of €380 on summary conviction and €634 on indictment. For a second offence, the maximum fines are €507 and €1269 on indictment and for a third offence and on summary conviction, the maximum fine is a 12-month prison sentence, a €1,269 fine or both. The cultivation of cannabis plants is also an offence under the Act. In contrast the possession of a drug other than cannabis

attracts a harsher maximum penalty, of 12 months' imprisonment on summary conviction, a €1269 fine or both. For conviction on indictment of these drugs, the maximum sentence is seven years' imprisonment, a discretionary fine or both (Connolly, 2004).

4.3 British Cannabis policy

The debate over cannabis law reform remains one of the most contested areas of international drug policy. Many of the negative consequences related to cannabis have unfortunately been attributed to its legal status, rather than to any properties of the drug itself. The legal status of cannabis has come under increased debate in recent years in Ireland probably as a result of the decision in Britain in 2001 to examine their then current classification of cannabis.

In 2000, The Police Foundation in Britain produced a report *Drugs and the Law* which recommended reclassification of cannabis on the basis that "by any of the main criteria of harm - mortality, morbidity, toxicity, addictiveness, and relationship with crime - it is less harmful to the individual and society than any of the other major illicit drugs, or than alcohol or tobacco" leading to a conclusion that the existing law on cannabis produced more harm than it prevented and that it lead to the criminalising of "large numbers of otherwise law-abiding, mainly young, people to the detriments of their futures".

In 2002, the Advisory Council on the Misuse of Drugs (ACMD) concluded that the current classification of cannabis in Britain was disproportionate to its toxicity and to other substances that were then currently also similarly classified as Class B drugs e.g. amphetamines. They recommended that the existing law be relaxed and that cannabis be reclassified from Class B to Class C - a class that also includes performance enhancing steroids. The reclassification was finally enacted in late January 2004. The main pragmatic difference in this reclassification is that while supplying and trafficking Class C drugs remain criminal offences, possession of cannabis for personal use is no longer subject to arrest.

There was considerable support for this reclassification on the basis that the available evidence suggested that cannabis was considerably less harmful than many of the drugs it was currently classed alongside in Class B. It was felt that young people in particular needed to be able to assess potential harms of illicit substances as accurately as possible and only an accurate classification would do this. A classification that was too high could lead it was felt, to young people disregarding not only cannabis warnings but also warnings about more serious drugs like

crack and heroin, according to a drugs information charity (*Drugscope* (2004) *www.drugscope.org.uk*).
In March 2005 the then British Home Secretary Charles Clarke asked the ACMD to examine new evidence, particularly the link between cannabis and psychosis and to consider whether this changed their assessment of the drug's classification.
In January 2006 it was announced that cannabis was to be retained as a Class C drug (ACMD, 2005). The ACMD remained nevertheless of the view that cannabis is harmful and that its consumption could lead to a wide range of physical and psychological hazards. It did not however recommend that the classification of cannabis products should be changed on the basis of the results of recent research into the effects on the development of mental illness. Although cannabis was considered to be unquestionably harmful, in the view of the ACMD its harmfulness did not equate to that of other Class B substances either at the level of the individual or of society.
Two conclusions from the ACMD report are worth stating however:
1. That cannabis is harmful and that its use can lead to a wide range of physical and psychological harms and hazards; that the mental health effects of cannabis are real and significant; that cannabis is potentially harmful with short-term risks to physical health; that a substantial research programme into the relationship between cannabis and mental health should be instituted; that the Government ought to seek to reduce the use of cannabis and that the cultivation, supply and possession of cannabis should remain illegal.

2. That the level of classification is only one amongst the issues to be addressed and that priority needs to be given to proper enforcement of the law, to education and to campaigning against the use of cannabis.

It has been felt that the debate about reclassification in Britain has actually helped to raise awareness of the dangers of cannabis but a major public health campaign to reinforce this message has been called for. "Cannabis is harmful but less so than Class B drugs and there is no evidence that a move back to B would reduce levels of use. Since reclassification there had been a small decrease in cannabis use particularly among young people and the police are better able to focus on tackling even more harmful drugs. There was some initial confusion following reclassification but the vast majority of people now realise that cannabis is illegal and not harmless" (*Drugscope* Press Release, January 2006).

The mental health charity *Rethink* has been critical of the relative lack of importance placed on the evolving evidence of a causal link between psychosis and cannabis use in the debate on cannabis classification, a focus on that "rather than fiddle with its legal status" being their

contention (*www.rethink.org/cannabis*). They are also disparaging of the lack of movement on the promised public health education campaign that was pledged when the Home Secretary announced the maintenance of the *status quo* in relation to cannabis remaining a Class C drug in January 2006. This is contrasted unfavourably with the French Government spending €3.8m on a communications campaign about cannabis in 2005. *Rethink* is also lobbying for:

- Drugs education in schools about the mental health effects of cannabis.
- Protection and information for people with severe mental illness.
- More investment in services for people with cannabis dependence as most investment has been into drug treatment services has been for those with Class A dependency e.g. problem opiate use.
- More research to clarify the link between cannabis and mental illness.

This public debate continues with a further commitment from the Home Secretary to conduct more research into the links between cannabis and mental health, and to review the drug classification system once again, at a future point.

4.4 Some Alternatives in International Cannabis policy

In compliance with international drug treaty obligations, Dutch law states unequivocally that cannabis is illegal yet in 1976 the Dutch adopted a formal written policy of non-enforcement for violations involving possession or sale that was formally limited in 1995 to 5g limit for possession and a 500g limit on trade stocks through "coffee shop" outlets. The primary focus in the Netherlands has been on harm reduction leading to a government decision to control drug markets according to the perceived risk of different drugs. The risks associated with cannabis use has been perceived as socially acceptable leading to its being separated from other more dangerous drugs such as heroin or cocaine. These laws are aggressively enforced, and outlets cannot advertise, sell to minors, deal in other drugs on the "coffee shop" premises, exceed their stock limit or have public disturbances arise in their neighbourhoods arising from their trade.
The Dutch experience is a mixed one in that the commercialization of cannabis has promoted its further use (MacCoun & Reuter, 2001). Although the consumption of cannabis is subject to sanction, its supply retains the broader criminal element with ongoing fears that organised crime avails of the relaxation in relation to cannabis to hide trafficking in

more dangerous drugs. Adjoining European countries have complained about "drug tourism" which has lead to stricter internal Dutch controls being introduced and the overall number of "coffee shops" that had grown with the initial relaxation in the law being have been reduced by 50%. Dealing in more dangerous drugs is not tolerated and lengthy prison sentences can be imposed (Ghodse, 2002).

Certain states of the USA decriminalised cannabis in the 1970s making it a civil offence punishable by a fine. States that decriminalised did not report an increase in consumption in comparison to states that did not, apart from Alaska where 12-17 year olds were found to be smoking cannabis at twice the national average, after decriminalisation (CASA, 1995).

4.5 Irish Views

Interviewees in the National Advisory Committee on Drugs (NACD) study in 2002 were asked whether or not "people should be permitted to take cannabis for recreational reasons". Overall, only 21% of the Irish population indicated that this should be permitted. Interestingly only 60% of the past cannabis users endorsed this statement. A similar finding was noted in a survey of public opinion regarding cannabis conducted in 2001. One in seven people thought that cannabis should be legalised for recreational use (Sinclair *et al,* 2001). In another nationwide study of public opinion in 1999, involving 1000 adults, 24% agreed that cannabis should not be against the law (Bryan *et al,* 2000).

The vast majority of Irish people (69%) disapprove of people smoking cannabis occasionally (NACD, 2005a). Again, a substantial minority (23%) of those who had smoked cannabis in the past now disapproved of people smoking cannabis occasionally. With regard to the perceived risk to smoking cannabis regularly, the majority of the Irish population perceived this risk to be at least moderate (83%). This rose to 87% among the adults who had never used cannabis. Among those who had tried cannabis at least once in the past, 62% perceived the risk with regular use to be at least moderate. Earlier research indicated that younger people perceive much less danger in cannabis than older people in Ireland (Bryan *et al,* 2000).

In rejecting suggestions that Irish law should be changed in regard to cannabis to mirror the British decision, Noel Ahern TD, Minister of State with responsibility for the National Drugs Strategy stated in late January 2004 that, "We're quite happy with how the law stands... In the UK, even after reclassification, in theory you can still get a tougher prison sentence than here, so in many ways they are more or less coming into line with how we are".

In July 2004 Junior Health Minister Tim O´Malley who has responsibility for the Mental Health portfolio warned against the dangers of any move to reclassify cannabis in Ireland. Minister O´Malley claimed in a press release[5] that the recent decision by the UK authorities to downgrade cannabis to a Class C drug should not be repeated here.

Minister O´Malley, claimed that the abuse of cannabis in Ireland was having a detrimental effect on the mental health of users and that he could see a rise in serious mental health problems in the years ahead.

"According to recent findings of the National Advisory Committee on Drugs (NACD), cannabis is the most widely abused drug in this country, with prevalence rates at least twice as high as other illegal drugs. This widespread abuse raises serious concerns about the damage being done to users, especially to teenagers and young adults."

"Cannabis has been associated with the increased risk of developing schizophrenia in otherwise healthy individuals. The increase of risk is directly associated with an increase in frequency of use."

Minister O´Malley claimed that the reclassification of cannabis in the UK sends out the wrong message to users that this is a ´safe´ drug and that it can be used with impunity. "Greater education, as opposed to reclassification, must continue to be the Government´s response. Most young people remain unaware of the potential dangers to their mental health caused by using cannabis and think they can smoke this drug recreationally without any long-term consequences."

4.6 A parent's perspective

The Observer journalist Sue Arnold, who has the chronic eye condition, *retinitis pigmentosa* initially championed cannabis after crediting it with saving her eyesight but has changed her view on cannabis after her college-age son "had what psychiatrists call 'a psychotic episode,' triggered by cannabis…my son spent six months in hospital in an intensive care unit (ICU). He was prescribed different drugs and, after a series of events which are too difficult and painful to describe, has just resumed his final year at university. He's still on medication and will probably have to take it for ever. It goes without saying that if he ever

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[5] UK Cannabis Change should not be followed in Ireland - O´Malley: Junior Health Minister warns of mental health dangers associated with drug, issued by the Department of Health & Children.

smokes another spliff he will have a relapse." (Observer 18, January 2006)

5. Cannabis and Mental Health

5.1 Introduction

It has long been recognized that there is a association between cannabis use and mental illnesses such as depression, suicidal thoughts and schizophrenia. However for many years it was assumed that individuals who were already depressed or psychotic were more likely to take cannabis rather than cannabis having a causal role in these disorders. This question has been extensively researched over the past few years and the balance of opinion among psychiatrists has now shifted to the view that cannabis smoking is a causative agent in the development of psychosis and depression for some people. In January 2006 the Advisory Committee on Misuse of Drug (UK) concluded in a report on cannabis that .. ' The mental health effects of cannabis are real and significant' (see section 4.3). In addition there is now growing evidence that th*e earlier the onset of cannabis use the stronger the link with mental illness*. This evidence is reviewed below.

5.2 Psychosis

5.2.1 Definitions

- **Psychotic symptoms:**

Psychotic symptoms are defined as delusions (abnormal beliefs); hallucinations (abnormal perceptual experiences) and disordered thinking. Many people (up to 20% of the population) may experience psychotic symptoms at some time during their lives.

- **Schizophrenia**

Schizophrenia is a serious mental illness affecting 0.5-1% of the population over the course of their lifetimes. In addition to psychotic symptoms (see above), individuals with schizophrenia characteristically have other problems such as loss of motivation, disturbances of behaviour, and cognitive deficits. These symptoms tend to be enduring and disabling. Full recovery from schizophrenia occurs in only about 10-20% of sufferers. Treatment of schizophrenia accounts for a significant proportion of the mental health budget. Costs are also associated with lost years of productivity due to the early onset of the condition.

- **Schizophreniform disorder**

This is a condition in which all the diagnostic criteria for schizophrenia are met but symptoms have persisted for less than six months. For some it is a transient condition from which they make a full recovery. For others it progresses to schizophrenia.

5.2.2 Cannabis use among patients with schizophrenia

There is clear evidence that use of cannabis worsens the symptoms of schizophrenia, increases the risk of relapse and worsens outcome (Linzen et al, 1994, Grech et al, 2005). Unfortunately there is a very high prevalence of cannabis use among patients with schizophrenia. The reasons for this are, as yet, unknown. It is thought that cannabis may induce an immediate anxiolytic effect whereas the effects on worsening of psychotic symptoms are delayed. The high prevalence of cannabis use and associated problems with illicit drug dealing are a problem in many psychiatric institutions and difficult to control.

5.2.3 Can cannabis cause schizophrenia?

The question of whether cannabis use can 'cause' or contribute to causing schizophrenia has been a controversial issue for many years. Although suspected for decades, only recently has strong evidence emerged to support a *causal association*. The psychiatric and scientific community initially rejected this association but there has been a change of opinion over the past four years based on the emergence of new data from large prospective epidemiological studies (Arseneault et al, 2002; Van Os et al, 2002; Zammit et al, 2002; Henquet et al, 2005). This evidence is summarized in Table 5.1 (below). Essentially a*ll* studies which have specifically examined this issue have shown that cannabis use confers an increase in risk for later schizophrenia outcomes.

The issue of whether cannabis use is merely a manifestation of a preexisting early psychosis has been addressed by two studies. (1) The study by Arseneault et al (2002) was able to adjust the relationship between cannabis use at age 15 and later schizophreniform disorder for the prior presence of psychotic symptoms at age 11. The results showed that there was still a three-fold increase in risk for later schizophreniform disorder among adolescent cannabis users even when individuals with prior psychotic symptoms were excluded from the analysis. Henguet et al (2005) also showed that adolescents with no prior symptoms were at

increased risk of later psychosis if they used cannabis in adolescence compared with adolescents who had not used cannabis.

Three meta-analyses (ie analyses that pool together the results from similar studies examining the same question) (Henquet et al, 2005; Semple et al, 2005; Arseneault et al, 2004) examining this association between cannabis use and later psychosis have been published since 2004.

1) Arseneault et al (2004) found a pooled odds ratio of 2.3 (ie 2.3 fold increase in risk) and concluded that 'Cannabis use is a component cause …part of a complex constellation of factors leading to psychosis'
2) Semple et al (2005) found a pooled odds ratio of 2.9 and concluded that 'The available evidence supports the conclusion that cannabis is an independent risk factor both for psychosis and for the development of psychotic symptoms'
3) Henguet et al (2005) found a pooled odds ratio of 2.1 and concluded that 'Cannabis is a component cause in the development of psychosis…….in which gene-environment interactions are most likely to explain this association'.

One review of psychological and social sequelae of cannabis and other illicit drug use by young people (MacLeod et al, 2004) concluded that 'Available evidence does not *strongly* support an important causal relation between cannabis use by young people and psychosocial harm *but cannot exclude the possibility than such a relation exists*'. This review was not a meta-analysis and the interpretation of their results has proven controversial.

Case History

Sam, the 27-year-old son of mental health worker, Tom, began smoking cannabis at 16, graduated to smoking up to 10 joints a night over weekends, and then, in his twenties, was diagnosed as schizophrenic. 'Sam was a brilliant sportsman: a gifted footballer, a superb runner, a natural athlete,' says his father. 'Now, he is just a shadow, a recluse. This is definitely an emerging issue. Everyone knows a "dope head" who has used cannabis, the "safe" drug. It's not just the number of cases of schizophrenia and psychosis that's a concern, it's the thousands upon thousands who have lost a future.'

Tom now campaigns for greater public awareness of the adverse psychological effects of cannabis.

Case History

John, a 22 year-old student developed paranoid delusions and a severe anxiety state with symptoms of derealisation and depersonalization one hour after smoking 'skunk'. He reported 'watching himself lying on the bed' and he became suspicious that his family were concealing some problems. He became increasingly distressed over the next eight hours believing that he had incurred 'brain damage' secondary to the cannabis use with an transient feeling of irrational anxiety and losing the perception of his body. Over the following two weeks there was slow resolution of his symptoms but the delusion of having incurred brain damage secondary to the use of cannabis persisted. He is currently being treated for schizophrenia having relapsed four months following his first presentation with acute paranoid delusions regarding his family.

Table 5.1 Prospective studies examining association between cannabis use and later psychosis

Reference	Number of subjects	Age at baseline	Years of follow-up	Outcome	Odds Ratio* (95% CI)
Andreasen et al (1988)	45,570	18	18	Schizophrenia	2.3 (1.0-5.3)
Zammit et al (2000)	50,053	18	27	Schizophrenia	3.1 (1.7-5.5)
Van Os et al (2002)	4,045	18-64	3	Psychotic symptoms	2.8 (1.2-6.5)
Arseneault et al (2002)	759	15-18	11	Schizophreniform disorder	3.1 (0.7-13.3)
Weiser et al (2002)	50,413	16-17		Schizophrenia	2.0 (1.3-3.1)
Fergusson et al (2003)	1,011	18	3	Psychotic symptoms	1.8 (1.2-2.6)
Stefanis et al (2004)	3,500			Psychotic symptoms	4.3 (1.0-17.9)
Henguet et al (2005)	2,437	14-24	4	Psychotic symptoms	1.7 (1.1-2.5)

* Adjusted for social factors, other drug use, IQ and prior psychotic symptoms (if data available)

5.2.4 How big is this effect?

Cannabis use appears to cause a *2 to 3-fold increase* in the risk of later schizophrenia outcomes**.**

It is estimated that cannabis use is a factor in the development of schizophrenia in *8-10% of all cases of schizophrenia*. This means, for example, that 25,000 of the 250,000 people with schizophrenia in the UK could have avoided the illness if they had not used cannabis (Murray, 2006). It seems safe to assume that cannabis use accounts for a similarly high proportion of schizophrenia cases in Ireland, given the high rates of cannabis use found here (see Epidemiology chapter).

5.2.5 Who is most at risk?

- **Teenage users:** Adolescent-onset cannabis use confers an even higher risk of later schizophrenia – *about four-fold* (Arseneault et al, 2002). *The earlier the age at starting cannabis use the higher the risk.* Arseneault et al (2002) found that those who were using cannabis by age 15 were at higher risk of later psychosis than those who started after age 15. In fact 10% of the adolescents who were using cannabis at age 15 were later diagnosed with schizophreniform disorder. This is particularly worrying given the high rates of teenage cannabis use in Ireland and the continuing decrease in the age at initiating cannabis use (see section 3.5) A recent survey carried out in collaboration with the World Health Organisation (WHO) found that one in every four boys and one in every seven girls in Ireland aged 15 years reported using cannabis in the year prior to the survey (Collins et al, 2004).

Case History
James, in his twenties, began smoking cannabis at 15. 'The reason I never did any other drugs was because their dangers were well known. I was a sensible person,' he said, aware of the irony. 'Even when I went to two GPs, saying I was having problems with anxiety and paranoia, they gave me antidepressants and said if the cannabis helped me to relax, I should carry on.'
At 19, he had a breakdown and was hospitalised with drug-induced psychosis. At school, he achieved good exam results. Now he is unable to hold down a job. 'My brain works but I don't do well in social situations. If only I'd known about the risk.'

Case History

Martin is a sixteen-year-old boy who was initially placed in care by his mother when he was eight years old. He has been prone to angry outbursts throughout his life. His mother has a history of depression and alcohol abuse, with many instances of self-harm over the years. Due to his difficulties, Martin has had multiple changes in school since early childhood and he finally dropped out at the age of 14 years. He has had multiple foster care placements, with occasional periods back at home with his mother. These changes to his living arrangements and haphazard schooling have resulted in difficulty in forming peer relationships and difficulty in trusting adults.

He began smoking cigarettes at the age of 11years and has been getting drunk on an intermittent basis from the age of 12 years. He began smoking cannabis at the age of 13 years and his cannabis use has persisted. In the past year he has been smoking it on a daily basis. In the past two months he has become quite paranoid in his latest care placement. He believes that he is being observed through a two-way mirror in his bedroom and believes that his bedroom is bugged. He has heard voices criticising him when there is no one in the room. He is becoming increasingly distressed by these thoughts. He says that he has been using cannabis to help him relax and to deal with this distress.

- **People with a tendency to psychosis**: A large prospective study of 2437 young people from Germany found that cannabis use increased the risk of psychotic symptoms generally but there was a much stronger effect in young people who had evidence of predisposition to psychosis (Henquet et al, 2005). Therefore young people who have already experienced psychotic symptoms (however mild or transient) are particularly at risk of later schizophrenia if they use cannabis in early adolescence.

- **Genetic vulnerability**: A recent study has shown that a common genetic profile, present in about *one-in-four of the population* (the val/val allele of the COMT genotype) confers a large increase (*about 10-fold*) in the risk of developing later schizophrenia-related illness if one begins to use cannabis in adolescence (Caspi et al, 2005). This effect size is equivalent to the size of the association between smoking and lung cancer. Interestingly this gene-environment interaction effect is not seen in those who begin using cannabis after the age of 18.

5.2.6 What kind of cause is it?

The studies reviewed earlier (see Table 5.1) show that cannabis use is not a necessary cause for the development of schizophrenia as not all adults with schizophrenia have used cannabis previously.

It is also clear that cannabis use is not a sufficient cause for schizophrenia because the majority of adolescent cannabis users do not develop schizophrenia in adulthood.

Therefore it is likely that cannabis is a component cause, among possibly many others, that form part of the causal constellation leading to schizophrenia.

Estimates of the population risk attributable to cannabis suggest that cannabis could account for about 8-13% of psychosis. The task of deciding the harms of cannabis is essentially a 'choice of evils' in which the rights of the majority to use cannabis without experiencing problems are balanced against the risks for a significant minority (about 10% of adolescent users) who may develop serious mental health consequences.

5.3 Depression and Suicide

There is a high rate of depression among those seeking treatment for cannabis dependence and the rate of cannabis use is higher among those being treated for depression (Degenhardt et al, 2001; Chen et al, 2002). Longitudinal research conducted in the United States, Australia and New Zealand has provided evidence of a causal connection between cannabis use and depression.

There is a higher rate of cannabis use among those making a serious suicide attempt (Beautrais et al, 1999).

A large twin study from the US has shown that the twin who was dependent on cannabis was almost *three times more likely to think about suicide and attempt suicide* than his-her non-cannabis dependent co-twin (Lynskey et al, 2004).

5.3.1 How big is this effect?

A 16-year study showed that individuals who were not depressed and then used cannabis were *4 times more likely* to be depressed at follow-up (Bovasso et al, 2001).

5.3.2 Who is most at risk?

- **Adolescent users**: A 14-year follow-up study showed that cannabis use *during childhood and adolescence* increased the risk of later major depression by 17%. This study was one of the first to call attention to the psychiatric implications of early cannabis use. (Brook et al, 2002).
- **Frequent users (teenage):** A study from New Zealand found that (at least weekly) cannabis use among *young people* was associated with depression, juvenile delinquency, suicidal thoughts and suicide attempts by age 21 years (Fergusson et al, 2002).
- **Teenage girls**: Another New Zealand study (Patton et al, 2002) found that daily use of cannabis increased the risk of depression *five times* among teenage girls.

Case history

Billy began drinking alcohol at the age of 10, having grown up in a home where his father and grandparents were heavy drinkers. Within a year he and his friends were also smoking tobacco and cannabis. At the age of 16 his behaviour changed and he began to falsely accuse his younger siblings of interfering with his belongings, picking fights with them that sometimes ended in violence. This lead to a lot of rows at home and his parents threatening to throw him out unless his behaviour improved and his drug taking stopped. Billy disappeared and his body was recovered from the sea 2 weeks later. At postmortem significant levels of alcohol and cannabis were found in his blood.

Case History

Earlier this year 23-year-old Roy died after bingeing on methadone and cough medicine. The coroner underlined the tragic downhill spiral that cannabis dependency can produce in a mentally ill person. Roy had begun to smoke joints at age 14 and eventually moved on to 'skunk'. He was diagnosed as schizophrenic at 19. 'The use of cannabis exacerbated his mental health problems,' the coroner said. 'It predisposed him to smoking more regularly than was good for him.'
Roy's sister, Lisa, said: 'It was horrible. He was sectioned at 19 when it should have been the best time of his life. He had been a bright boy at school. One doctor told my mother that the increasing use of skunk had created a ticking time bomb.'

5.4 Effects of cannabis on intellectual functioning

Over the last 30 years numerous studies have examined the psychological consequences of cannabis use. Of particular interest has been the investigation of whether there are any long-term cognitive effects associated with cannabis use and if so, what is the nature of these effects.

Recent studies have shown that mathematical and verbal skills as well as attention, information processing and motor functioning have all been affected in chronic cannabis users compared to non-users. These effects persist after wash-out periods of between 7 and 31 days.

A series of studies by Solowij *et al* (1995; 1998; 2002) found that cannabis users were poorer than controls at filtering irrelevant information and recalled fewer items on verbal learning tests. These effects were not due to acute intoxication as users abstained from cannabis for 24 hours prior to testing and were found to worsen with years of regular cannabis use. Similarly Pope & Yurgulun-Todd (1996) found college students who were heavy cannabis users differed from non-users on tests of digit span, auditory processing, short-term memory and attention. In a further study Pope *et al* (2001) found that current heavy users performed significantly worse than controls on memory tasks after a 7 day abstinence from cannabis.

Bolla *et al*, (2002) found that heavy cannabis users were impaired compared to controls on measures of *memory and manual dexterity* even after a 28 day wash-out period. Messinis *et al* (2006) required users to be abstinent from cannabis for at least a 24 hour period and found that cannabis users were impaired on measures of *verbal fluency, verbal memory, attention and psychomotor speed.*

5.5 Brain structural and functional changes

Brain imaging studies show evidence of impaired brain function in heavy cannabis users. Functional brain scans show that cannabis use affects activity in certain brain regions both during rest and during the performance of cognitive tasks. The areas most frequently reported to be affected are the prefrontal cortex, the hippocampus and the cerebellum. Jacobsen et al (2004) Bolla *et al* (2005)

These findings are consistent with studies showing that one of the major cannabinoid receptor sites in the human brain is in the part of the forebrain associated with higher cognitive functions (Glass *et al*, 1997).

There are also actual brain structural changes associated with cannabis use. These changes may be more significant in those who start using cannabis in adolescence while the brain in still developing. One study (Wilson *et al*, 2000) has shown that those who started using cannabis early in adolescence had reduced grey matter in the frontal cortices compared to those with a later age of onset.

5.6 Cannabis and Prenatal Brain Development

Based on data from the Unites States cannabis is the most commonly used illicit drug by women of reproductive age and its use appears to increasing among this demographic group.

There is accumulating evidence that prenatal exposure to cannabis leads to the development of neurobehavioural and cognitive deficits (Hutzinick *et al*, 2006; Fried *et al*, 2003; 2001).

The strongest evidence comes from animal research which has shown that, cannabinoids administered to rodent mothers reach the brain of fetuses in substantial amounts due to the immaturity of the blood barrier. These studies have shown a resulting effect on the maturation of specific neurotransmitters leading to *irreversible effects on behaviour and brain structure* (Fernandez-Ruiz *et al*, 2000).

In humans, two longitudinal studies have found similar effects of heavy cannabis use during pregnancy. The Ottawa Prenatal Prospective Study (OPPS; Fried *et al*, 2002) used a sample of white, middle class families while the Maternal Health Practices and Child Development Study (MHPCD; Richardson & Day, 1998) used a sample of low-socioeconomic status families, a substantial number of whom were African American.

Both studies found *considerable and persisting impairments of executive functions of the offspring prenatally exposed to cannabis*. Specific abilities affected at follow-up were problem solving, sustained and focused attention, working memory and abstract and visual reasoning.

5.7 Age, Amount and Duration of Use

Important factors affecting the impact of cannabis use on both cognitive functioning and mental health outcomes are the age at which cannabis use is initiated, the amount used and the subsequent duration of that use.

5.7.1 *Consequences of adolescent onset cannabis use*

The data from many of the studies mentioned in previous sections clearly shows the significance of starting to use cannabis in early adolescence compared to onset in adulthood. Pope *et al* (2003) found that those who began smoking cannabis before the age of 17 were impaired on verbal IQ measures compared to controls. Arseneault *et al*, (2002) showed that adolescent onset cannabis use led to a four fold increase in the risk of developing schizophrenia; twice the odds normally quoted for onset in adulthood. Lynskey *et al* (2004) found that early onset use increased the risk of subsequently attempting suicide and Wilson *et al* (2000) found that those who started using cannabis before age 17 had a lower percentage of cortical grey matter compared to those who started later in life. Since the brain (particularly the frontal cortex) continues to develop during adolescence it is possible that cannabis may be exerting a neurotoxic effect of cannabis on the developing brain. Since cannabis use before age 12 is still rare the main evidence for neurotoxicity in humans will come from studies of adolescent users and prenatal exposure.

Case History

Daniel is 23, articulate, musically talented and academically bright. At the age of 19, after several years of feeling depressed, anxious and increasingly disconnected, he was diagnosed as having Asperger's syndrome, a form of autism.
Last September, after 18 months in a residential unit, Daniel decided to return to university. After several weeks at college, he began to do what he has always done, since the age of 15, to ease the feelings of alienation - he began to smoke cannabis excessively.
He gives a long and moving account of life with a cannabis addiction. 'At first, with cannabis, it becomes so much easier to float by unnoticed. But then you become paranoid. You're quick to assume the world isn't going to make a place for you.'.
'In my teens I used to champion cannabis but once you've taken yourself to places I've taken myself to, you can't hide from what your brain felt. Now, I don't get a high at all. Instead, my brain hurts so much, and I don't sleep for days. It goes wrong so quickly that what's going on internally becomes visible to everyone and that's frightening for me. No one at 23 who's been

into cannabis for years can get away with saying it doesn't mess your head up.

5.7.2 Dose and duration related effects

There is evidence of dose-related neurocognitive effects of cannabis use. In other words, as people use more cannabis over time they are more likely to demonstrate long lasting impairment in brain functioning. Skosnik *et al* (2001) found that prefrontal cortical functions were not disrupted by low doses of cannabis. Bolla *et al* (2002; 2005) found that performance on measures of memory and executive function deteriorated as joints per week increased and that heavy users (53-84 joints/week) compared to moderate users (8-35 joints/week) and controls had significant alterations in prefrontal brain activity. Similarly, Degenhardt *et al*, (2003) found, in a review of the literature, that there was only evidence for an association between depression and cannabis use at the heaviest, most frequent use end of the spectrum.

While the factors of use duration, frequency and amount are confounded in most studies, recent findings show that duration of use exerts an independent effect. Messinis *et al* (2006) compared neuropsychological functioning in long and short term heavy users and found that long-term users performed worse than short term users on measures of verbal memory and psychomotor speed.

5.8 Summary and Conclusions

There is strong evidence from large prospective studies of a causal link between cannabis use and mental health problems, with the strongest evidence for an association with schizophrenia.

There is also considerable evidence for long-term, detrimental effects of chronic cannabis use on cognitive (intellectual) function. Heavy use has been associated with impaired verbal skills, memory, attention and information processing.

There is particular concern about the effects of cannabis use on the developing brain (ie in adolescent users and those exposed prenatally). There is some evidence that exposure during these vulnerable periods

may lead to higher incidence of later mental illness and significant and lasting effects on intellectual functioning.

In summary cannabis use before age 17, as well as greater amounts and longer duration of cannabis use, all confer specific risk for impaired cognitive function and mental illness later in life.

6. Physical Aspects

6.1 Introduction

Irish 16 year olds have twice the rate of lifetime cannabis use compared to the average among the other European countries[6] and 17% of the general population has used cannabis at some stage in their life. The major motive for our widespread recreational use of cannabis is the experience of a subjective "high" - an altered state of consciousness which is characterised by emotional changes, such as mild euphoria and relaxation; perceptual alterations, such as time distortion, and; intensification of ordinary sensory experiences, such as eating, watching films, listening to music, and engaging in sex. When used in a social setting, the "high" is often accompanied by infectious laughter, talkativeness, and increased sociability.

6.2 Intoxication Effects

Cannabis affects almost every body organ. It combines many of the properties of alcohol, tranquillisers, opiates and hallucinogens; it is anxiolytic, sedative, analgesic, psychedelic; it stimulates appetite and has many systemic effects (Ashton, 2001).

The physical effects experienced by a user of cannabis will depend on the amount taken, the potency of the product, the mode of administration and the user's prior experience with the drug and whether any other drugs are being used concurrently. The user's expectations, mood state and attitudes towards the drug effects and the setting in which the drug is used are also important. In a major all-Ireland study of cannabis use published by the National Committee on Drugs in late 2005 it was revealed that the potency of cannabis available in Ireland has increased in recent years, increasing the risk of dependence and psychiatric problems (NACD, 2005a).

Cognitive changes are usually marked during a "high". These include an impaired short-term memory, and a loosening of associations, which make it possible for the user to become lost in pleasant reverie and fantasy, while making it difficult for the user to sustain goal-directed

[6] Investing in Parenthood: The Supporting Parents Strategy. Best Health for Children HEBE publications, 2002

mental activity. Motor skills, reaction time and motor coordination are also affected so many forms of skilled psychomotor activity are impaired while the user is intoxicated.

Not all the effects of cannabis intoxication are welcome. Some users report unpleasant psychological reactions, ranging from a feeling of anxiety to frank panic reactions and a fear of going mad. A depression of mood is also described. These effects are most often reported by inexperienced users who are unfamiliar with the effects of cannabis. More experienced users may also report these effects on occasion, especially after consuming cannabis when the effects may be more pronounced and of longer duration than those usually experienced after smoking cannabis.

Psychotic symptoms, such as delusions and hallucinations occur at very high doses of THC and in susceptible individuals at lower doses.

Cannabis has effects similar to alcohol and benzodiazepines (minor tranquillisers) on the performance of tasks, including both thinking and motor coordination. It impairs concentration and short-term memory, slows reaction times, and impairs coordination. It will therefore reduce the ability to perform skilled tasks such as driving. After alcohol, cannabis is the drug most commonly found in drivers following fatal accidents.

Case History

Michael is a 28-year-old accountant. Last weekend while on a trip to Amsterdam with his soccer team, he and three of his friends purchased some cannabis in a 'coffee shop'. He was first introduced to hash at the age of 16 years, when his best friend was given some cannabis by an older brother. He had also smoked hash on a few previous occasions with friends while at college. On these previous occasions Michael found that cannabis made him quite tired and a little bit more relaxed.

However, after smoking cannabis in his hotel bedroom on his trip to Amsterdam, he found the experience to be very unpleasant. His heart was racing. He felt very anxious and was frightened about sitting up. He insisted that his friends call a doctor. A doctor subsequently arrived at the hotel and gave him a sedating tablet which helped him to relax. Michael has decided never to smoke cannabis again. Although frightened by the incident his mood and mental state have normalised completely.

6.3 Respiratory Effects

The smoke from herbal cannabis preparations contains all the same constituents as tobacco smoke, apart from nicotine, including carbon monoxide, bronchial irritants, tumour initiators, tumour promoters and carcinogens (British Medical Association 1997). As a result, cannabis smokers experience the same health problems as tobacco smokers, including bronchitis, emphysema, and lung cancer. It is estimated that up to four times the amount of tar can be deposited on the lungs by smoking a cannabis joint compared to a standard tobacco cigarette. Cannabis smoke contains more carcinogens than tobacco smoke leading to bronchitis and a doubling of the risk of certain types of cancer. The way that a cannabis joint is smoked with deep and prolonged inhalation, the absence of a filter and the higher combustion temperature than tobacco contribute to this potential for lung damage. Compared with smoking tobacco, smoking cannabis entails a two thirds larger puff volume, a one third larger inhaled volume, a fourfold longer time holding the breath, and a fivefold increase in concentrations of carboxyhaemoglobin (Wu *et al* 1988). The products of combustion from cannabis are thus retained to a much higher degree.

It has been calculated that smoking 3-4 cannabis cigarettes per day is associated with the same evidence of acute and chronic bronchitis as the same degree of damage to the bronchial mucosa as 20 or more tobacco cigarettes a day (Benson & Bentley, 1995).

In a 2003 study, researchers in England found that smoking 3-4 cannabis cigarettes a week for less than six years causes a marked deterioriation in lung function when comparing non-smokers, tobacco smokers and those who smoked cannabis. These findings are important in young individuals in which the use of cannabis is increasing and may have serious long-term implications for what is currently regarded as a relatively harmless recreational habit (Nuttall *et al,* 2003).

A striking feature of cannabis smoking is that it is associated with bullous lung disease in young people (Johnson *et al* 2000). Inflammatory lung changes, chronic cough, and chest infections are similar to those in cigarette smokers, but may also be commoner in younger people (Roth *et al* 1998). Premalignant changes have been shown in the pulmonary epithelium, and there are reports of lung, tongue, and other cancers in cannabis smokers (Henry *et al*, 2003).

Case History

Jim is a 46 year old married carpenter with three teenage children who has been a regular cannabis smoker since his early teens, and has

always found this use an aid to relaxation. He developed a persistent sore throat and sensation of "pressure" in his palate that was unresponsive to routine medical treatment and was referred on to an Ear Nose & Throat specialist. A rare tumour was discovered is his palate on MRI scan that has made a moderate response to treatment[7].

6.4 Cardiovascular Effects

Cannabinoids most commonly produce effects on the heart and vascular system that are dose related. The most immediate effect of cannabis use by all routes of administration is an increase in heart rate of 20-50% which occurs within a few minutes to a quarter of an hour and lasts for up to three hours. This may reach rates of up to160 beats/minute or more but tolerance develops with frequency of use. Changes in blood pressure also occurs which depend upon posture - blood pressure is increased while the individual is sitting and decreases when standing. A sudden change in posture from lying to standing may produce a drop in blood pressure and fainting, an effect which may explain the feeling of "light-headedness" and faintness that is often the earliest indication of intoxication in inexperienced users. In healthy young cannabis users these cardiovascular effects are unlikely to be of any significance although they may magnify anxiety in inexperienced users.

Cannabis-induced effects on the heart and blood pressure as described above may contribute to the panic attacks sometimes experienced by naive users who may interpret the palpitations and the feeling of faintness as indicators of impending misadventure, thus magnifying any pre-existing anxiety feelings in a vicious circle that leads to a panic attack. These and other cardiovascular effects may carry a risk for individuals with pre-existing cardiac disease and several cases of acute and sometimes extremely serious cardiac incidents may occur in young cannabis smokers, although there are no records of fatal overdose of cannabis.

6.4 Other effects of cannabis use

Impaired motor coordination, hunger, and an increased desire for sugar rich foodstuffs also occur. It can reduce sperm production, disrupt the menstrual cycle, and affect intrauterine growth leading to an increased risk of low birth weight babies in cannabis using mothers. There is also a widespread dilatation of blood vessels and reddening of the conjunctivae - red eyes being a characteristic sign of cannabis use.

[7] Such tumours have been attributed to chronic persistent cannabis use.

6.5 Therapeutic uses of cannabis

Cannabis has many pharmacological actions and it is effective in treating several medical conditions. These include nausea associated with cancer chemotherapy, loss of appetite and physical wasting associated with AIDS, the serious eye condition, glaucoma, muscle spasms occurring in multiple sclerosis and other disorders that produce involuntary muscle contractions, chronic pain, and migraine headaches (British Medical Association, 1997).

Despite the fact that cannabis has some beneficial health effects, these should not be considered in isolation from its negative health consequences. Even if the active ingredient within cannabis (THC) does demonstrate effectiveness in treating some medical conditions, it seems inevitable that administration will not be via the smoked route of use. Oral administration would provide safer and more consistent delivery of a fixed dose. It would then need to undergo the same rigorous research investigation as other medications in order to confirm its efficacy and to demonstrate its safety. Given the growing evidence of neurological and psychiatric harm associated with cannabis use, it seems very unlikely that the safety profile will be seen to be acceptable.

Case History

Eoin developed Multiple Sclerosis in his early 30s and this condition progressed very slowly in the early years. He refused Interferon treatment in 2001 and opted instead to have a series of "holistic" alternative treatments, using cannabis to reduce muscle pain and spasm, eventually leading to daily heavy cannabis use. He developed a fear and suspicion that his life was in danger from his carers and began telephoning the Gardaí and emergency services to come to his aid several times each night eventually culminating in referral to his local mental health services and an involuntary hospital admission.

7. Social harm

7.1 Introduction

All intoxicating substances are associated with some risk of social harm. These harms are variable in their origin; some are associated with the actual intoxicating effects of the substance, which can be disinhibiting and result in increased risk taking, while reducing psycho-motor performance and therefore resulting in a variety of accidents. Substances can also lead to emotional volatility. When this is associated with disinhibition, it may be manifested in violent behaviour. Frequent drug use also has a negative impact on the individuals' ability to perform ordinary social roles. This may include the ability to perform at work and in educational settings. It can also have a negative impact on an individual's ability to function in loving relationships or in parenting and caring roles.

Although cannabis is less likely than alcohol to cause someone to become aggressive and engage in public order offences, its use is in itself illegal and funds an extensive criminal network of suppliers. This criminal activity places a burden, not only on society but also on the criminal justice system, which is here to protect society. People convicted of cannabis procession may suffer socially as a consequence of the conviction.

7.2Accidents and Risk Taking

7.2.1 *Road Traffic Accidents*

It is clear that cannabis can affect an individual's ability to drive. However the association with dangerous driving and road traffic accidents is not as robust as the association of alcohol with these outcomes. After smoking cannabis, research indicates that drivers tend to be quite self conscious and quite aware of their impaired abilities and make allowances of same. Many people who have road traffic accidents after consuming cannabis have also consumed alcohol. It is likely that there is a synergistic effect between these two substances, with the combination being more impairing than either substance alone.

In 2000 and 2001, a study was conducted examining drug use by drivers who were stopped by gardaí for appearing to be intoxicated (Cusack *et al*,

2004). It emerged that 21% of the drivers who were under the legal limit for alcohol tested positive for cannabis use. Cannabis was the drug most frequently identified among this group, with amphetamines being the next most common (9%). Among those who were over the limit for alcohol, 9.5% were also positive for cannabis. Cannabis was detected in the urine of drivers under the age of 35 about four times more often than in the samples provided by those aged 35-44 years. The study concluded that "the typical profile of the driving under the influence of drugs driver apprehended and tested is young, male, driving in an urban area with low or zero alcohol level with a specimen provided between the hours of 6am and 9pm with the presence of cannabinoids." Unfortunately, the current screening tests for cannabis give limited quantitative data. Consequently, it will be difficult to confirm cannabis intoxication in criminal proceedings regarding driving offences.

7.2.2 Other accidents

Due to the disorientating effects of cannabis and its impairment on some psycho-motor functions as described in the chapter on "Psychological Consequences of Cannabis Use", it is inevitable that cannabis plays a role in some serious accidents each year in Ireland. These may include falls and drownings.

7.2.3 Sexual Risk Taking

Cannabis is not likely to be associated with the same level of risk taking which is seen with alcohol. However, it may diminish users' inhibitions and make them more likely to make choices which they would not make if there were not under the influence of a substance. This brings with it the risk of unplanned pregnancies and sexually transmitted infections.

7.3 Violence and Criminality

7.3.1 Violence

Cannabis is not as likely to cause violence as other substances such as alcohol or stimulants (e.g. cocaine and amphetamines). However, there are some circumstances in which cannabis use could precipitate violent behaviour. Firstly, some individuals when first introduced to cannabis can develop severe anxiety symptoms. It is possible that these people might become aggressive as a consequence of these feelings of fear and distress. Secondly it is known that cannabis use can cause acute psychotic episodes and can also precipitate relapses of schizophrenia. While only a minority of psychotic patients is violent, some people can become violent in response to their paranoid delusions or hallucinatory symptoms. Finally, it has become clear in recent years that heavy cannabis users do experience withdrawal symptoms following abrupt

discontinuation of use (Vandrey *et al*, 2005). Irritability is one feature of the withdrawal syndrome. This irritability might cause some of the individuals to become aggressive more easily.

There is a clear association between cannabis use and antisocial behaviour. However, the majority of this association has its origins in the fact that people who are prone to anti-social behaviour are more likely to co-incidentally smoke cannabis. It is very rarely the case that cannabis is actually the cause of the antisocial behaviour demonstrated by these individuals. A recent study of Dutch adolescents demonstrated that a link between antisocial behaviour and cannabis use is also seen in societies with a more liberal attitude towards cannabis (Monshouwer *et al*, 2006). In a 1998, the Garda Síochána conducted a study to explore the link between alcohol or drug use and criminal behaviour (Miller et al, 1998). They studied 4,334 criminal offences across Ireland and the arresting garda was asked for their "informed opinion" as to whether alcohol or drugs had played a role in the offence. Alcohol was identified as a factor in 42% of offences. In contrast, cannabis was identified as a contributor in just 4% of cases.

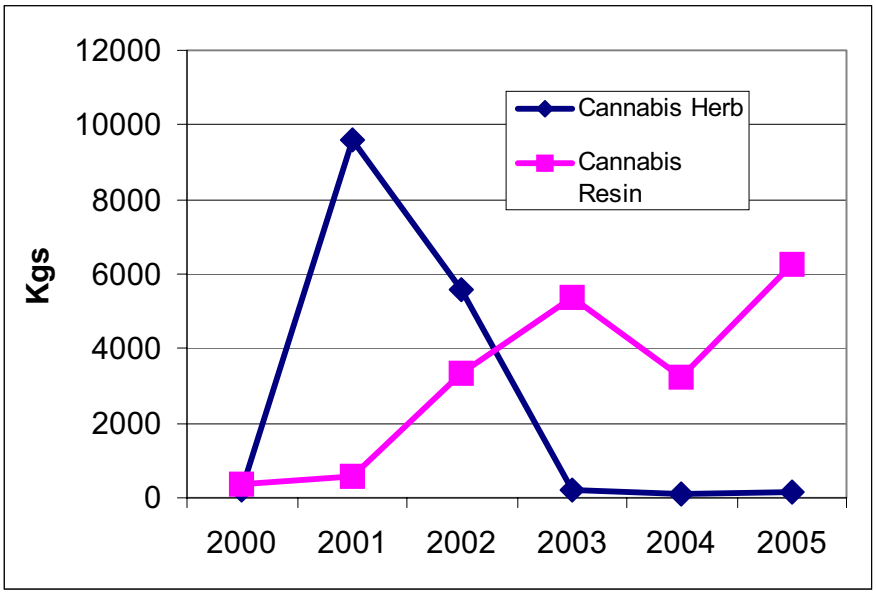
7.3.2 Illegal Drug Market

It is estimated that the illegal cannabis market is worth about €375m annually in Ireland (Connolly, 2005). The cannabis market is worth more than the combined market for cocaine, heroin, ecstasy and amphetamines. While it is difficult to estimate the profits made at the various levels of the dealing network, it seems likely that the majority of this money is actual profit, which increases the wealth of main importers, regional suppliers and local dealers. Given the great value of this market, it is not surprising that dealers will engage in violent behaviour and murder in order to maintain their profits. This brings with it a degree of fear and intimidation in those communities where dealing is prominent. Given the enormous demand for cannabis, it seems inevitable that this demand will be met. As each network of importers is imprisoned there will always be many others who are prepared to step in to meet the ongoing demand and take their share of the huge profits on offer (Connolly 2006).

Figure 6 provides information on the volume of Garda Seizures of cannabis during the period 2002 to 2005. There have been substantial annual fluctuations. However, there has been a sustained increase in the volume of cannabis resin seized in recent years. It is resin which is the preferred form of cannabis in Ireland (see Chapter on Epidemiology). The large volumes of cannabis herb seized in 2001 and 2002 relate to two

very large seizures in Dublin port of drug which was believed to be destined for the UK market.

Figure 6. Seizures of cannabis herb and cannabis resin in Ireland, 2000-2005 (Garda Commissioners Annual Reports)



It should be borne in mind that the liberalisation of the laws regarding cannabis, or indeed making the use and supply of cannabis legal, will not eliminate the criminal supply network. This is clear when one looks at the criminal activity that continues to surround supply and sale of a variety of legal substances on the black market, ranging from petrol to cigarettes and alcohol.

In Holland, where there is a "legal" supply network via coffee shops, it is estimated that only one third of the cannabis used in Holland is sold via these routes. The remaining cannabis continues to be sold through criminal networks (Runciman, 1999).

7.3.3 Public Disorder

While alcohol is an enormous contributor towards public disorder offences in Ireland, it appears that cannabis is a minor contributor public disorder (Miller *et al*, 1998). This relates to the intoxicating effects of cannabis, which is very different to those associated with alcohol.

7.3.4 Acquisitive crime

Although, cannabis has a cost, it is relatively cheap. A heavy cannabis user can maintain their habit at a cost of no more than €60 - 70 per

week. In order to put this in context, a heavy smoker who consumes 2 packets of cigarettes per day will spend €80 per week. A drinker who consumes 3 pints per day will also spend about €70 per week. Consequently, most cannabis users can fund their use through legal means and do not need to engage in shop-lifting, robbery or pick-pocketing to maintain their habit. Acquisitive crime may be an issue for heavy cannabis users who have no, or very little, legal income. This is most likely to be the case among younger teenagers who are not working and who do not receive pocket money. They may engage in petty crime in order to fund their cannabis use. Some heavy users may progress to small scale dealing of cannabis in order to maintain their use.

7.3.5 Criminalising "Ordinary Young People"

Among groups who criticize current legislative approaches to cannabis, one of their principal concerns relate to the fact that people are criminalised as a result of Irelands current response to the possession of cannabis for ones own personal use (Wodak *et al*, 2002). They argue that this brings these individuals into contact with the criminal justice system and they acquire criminal charges, which may damage their employment prospects and complicate their ability to travel abroad, etc. In 2005, criminal proceedings were initiated in over 6,000 cannabis related cases, under the Misuse of Drugs Act (An Garda Síochána Annual Report 2005). About three-quarters of these proceedings involve possession offences (Section 3), while about one quarter relates to supply offences (Section 15). A secondary consequence of the criminalisation of cannabis is that a substantial proportion of time spent by the police and the Courts is invested in dealing with cannabis possession offences. Some argue that society might benefit more if the resources currently invested in dealing with cannabis possession offences were redirected elsewhere.

One matter that tends to be overlooked in this debate is that the majority of people who commence cannabis use do so under the age of 18 years (see Section 3.3.1). A substantial proportion of cannabis that is consumed in Ireland occurs in people who are also under the age of 18 years. Cannabis use tends to diminish and peter out during the mid 20's. Therefore, even if the law was liberalised, it is likely that under 18's will still need to be treated differently and their use accounts for a substantial proportion of the use that occurs in Ireland.

Case History

Jennifer is a 16-year-old girl who lives with her parents and two younger siblings. Her mother is a solicitor and her father is a businessman. Jennifer is getting on quite well at school and attained 8 honours in her junior cert. She is popular with both her friends and teachers.

In the past year she has been going out with her friends on a Saturday night. On occasion this involves going to her friends houses and on other occasions this involves going to discos. She always drinks alcohol with her friends on these nights. They buy a bottle of vodka as a group and they mix this with orange juice. Her parents are aware that she is drinking although they do not quite know the extent of her alcohol use. While her drinking used to cause a lot of arguments at home, her parents have become accepting of the fact, as she continues to get on well at school.

Jennifer has a new boyfriend for the past 3 months. Her boyfriend is 17 years old and he smokes cannabis at weekends. Jennifer has now begun to smoke cannabis with her boyfriend on her Saturday nights out, usually having a few drinks first. Her parents are unaware of the cannabis use. They continue to assume that her intoxication on return home is just due to alcohol. Some of her friends have begun to give out to her about her hash smoking telling her that she has become more boring and withdrawn.

7.4 Role in Progression to use of other drugs?

'Stepping Stone' or 'Gateway' Theory.
It is unusual for a person to abuse drugs such as cocaine, amphetamines and heroin without having first tried cannabis. Cannabis has received much attention as a possible 'gateway' drug. However, it should also be borne in mind that it is unusual for people to use cannabis without having used cigarettes and alcohol first. It should also be noted that the majority of cannabis users do not go on to use other "harder" drugs.

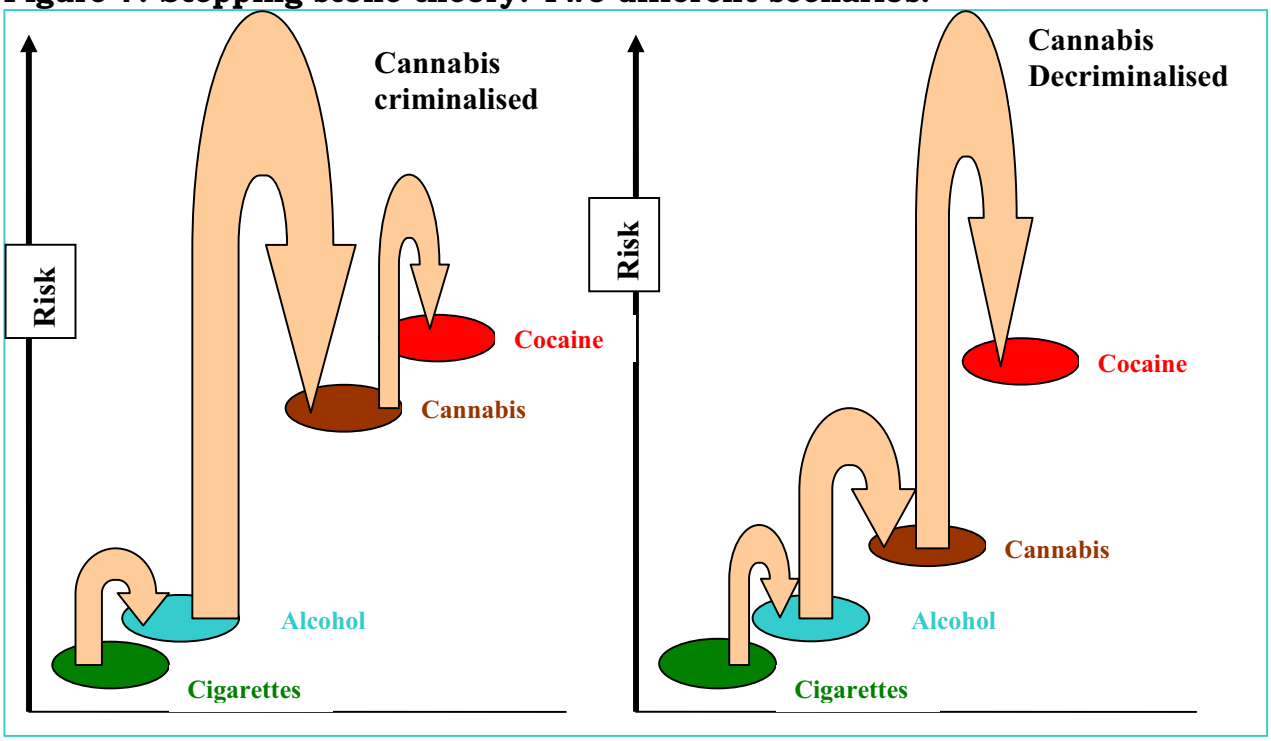
The gateway or stepping stone theories are not straight-forward (Zimmermann *et al*, 2005; Runciman, 1999). There are a number of proposed biological, psychological and social mechanisms behind the progression from alcohol/cigarettes to cannabis and then onto other illicit drugs. From the biological perspective, it is hypothesised that exposure to drugs sensitises the reward pathway within the brain to drug use, making further use more likely. For example, there is animal research which indicates that exposure to nicotine in early adolescence increases the rate at which animals later becomes dependent on cocaine (Collins & Izenwasser, 2004). From the psychological perspective, it is hypothesised that once people have tried drugs and enjoyed the hedonic

effects while not experiencing the threatened adverse effects, they will be more likely to chose to use other substances which are seen to be riskier in the future. From a sociological perspective, it is proposed that once people have crossed the threshold of using illegal drugs, then they will find themselves in contact with criminal networks and drug dealers, which will greatly increase the likelihood of experimenting with additional substances.

The gateway theory implies that there is a causal relationship between cannabis use and subsequent use of "harder" drugs. This causal relationship could have its origins in the biological, psychological or social mechanisms outlined above. The Stepping Stone theory does not necessarily imply a causal relationship. It acknowledges that there is a range intoxicating substances available in society, both legal and illegal. It proposes that people tend to use these substances in quite a set order, failing to progress to more dangerous or harmful drugs without first having tried less harmful substances. It doesn't imply that cigarette smoking "causes" cannabis use, nor does it imply that cannabis use "causes" later heroin or cocaine use. To use an analogy, most people who travel from Dublin to Derry will pass through Monaghan. However, it is not the passing through of Monaghan which "causes" these travelers to arrive in Derry.

Figure 7 below attempts to outline the stepping stone theory diagrammatically. In the scenario on the left, where cannabis use is criminalised, people have quite a jump to make in order to move from alcohol use to cannabis use. However, once they have made that jump, they have quite a small jump to make to cocaine use, as the criminal consequences of use are similar and they now have access to illegal drug supplies. In the scenario on the right, where cannabis use is decriminalised, the leap from alcohol to cannabis is quite small. It is therefore more likely for people to use cannabis in this environment. However, the leap from cannabis to cocaine is substantial.

Figure 7. Stepping stone theory. Two different scenarios.



Case History

Catherine is a 23-year-old woman who has been using heroin from the age of 17 years. Her mother was also addicted to heroin but died of an AIDs related illness when Catherine was 14 years old. Her father was alcohol dependent and was in and out of prison during Catherine's childhood.

Catherine began smoking cigarettes at the age of 10 years and she began drinking and sniffing aerosol cans at the age of 12 years. She became a regular cannabis smoker at the age of 13 years. Around this time she began stealing her grandmother's Valium and sleeping tablets and used to take these with her friends. She tried Amphetamines and LSD at this time but did not like the effects.

As her heroin use escalated in her late teens she began shoplifting to fund her use. She acquired a number of charged. She was also convicted of travelling in a stolen vehicle.

Although she was smoking heroin initially, she found that smoking didn't take away her withdrawals symptoms after a couple of years of use. It was also becoming very expensive to fund her use. She switched to injecting at this time. She entered treatment a few months later and remains on a Methadone treatment programme. She has a 2-year-old child and they live together in a flat paid for by rent allowance. Although she is no longer using heroin she continues to smoke cannabis when she meets up with her friends. Though she left school at the age of 15 years without any qualifications she has been

trying to access a FAS course over the past 6 months. However, this has been made difficult due to lack of crèche facilities for her daughter.

7.5 Impact on Social Roles

7.5.1 Impaired Work Performance.
The intoxicating effects of cannabis are likely to reduce the productivity of users who actually smoke cannabis in a work setting. Where individuals are engaged in work which involves fine motor skills and rapid motor responses, accidents are also be more likely to occur.

7.5.2 Poor Educational Attainment.
Young people who smoke cannabis perform less well academically. The association between cannabis use and poor educational attainment is complex. In most cases, it is likely that this association is a result of common antecedent risk factors. In other words young people with the typical profile of poor educational attainment are also at greater risk of using cannabis. However heavy cannabis use is inevitably going to impair concentration and thereby interfere with the ability to study and learn (see Section 5.4). Given that third level students are one of the groups most likely to report cannabis use in Ireland, it seems likely that cannabis is a factor contributing to poor attainment and drop out by a sub-section of Irish Students (Hope *et al*, 2005).

7.5.3 Marital Breakdown / Family Disharmony
Cannabis use can frequently cause problems for individuals in the context of other important relationships. Heavy cannabis user by one partner in a loving relationship may cause the non-cannabis using partner to grow extremely frustrated. In such instances it can contribute to relationship and indeed marital breakdown. Similarly in families where teenagers smoke cannabis, this can generate a substantial degree of upset and family rows, with parents disapproving of this use (Wodak *et al*, 2002). Individuals who enter treatment for cannabis abuse frequently cite the upset caused to the family and loved ones as the main reason for treatment seeking.

7.5.4 Homelessness
In a study of homeless people recruited from Dublin, Cork, Galway and Limerick during 2003, it emerged that cannabis was the illegal drug most commonly used by this population (Lawless & Corr, 2005). Forty-three per cent had used cannabis in the past month. The relationship between cannabis abuse and homelessness is complex. While cannabis use is a substantial precipitator of homelessness in only a small minority of

cases, its use and the consequences of its use may perpetuate homelessness in a substantial minority of cases.

7.5.5 Impaired Parenting

Where adults continue to smoke further to adulthood and after becoming parents, it seems inevitable that their cannabis use will impair their ability to successfully complete their parenting roll. Where young people grow up in an environment where cannabis use is accepted and actively engaged in, these children are much more likely to progress to cannabis use and indeed other drug use when they move into their teenage years.

7.5.6 Foetal Syndromes

It seems clear that mothers who continue to smoke cannabis during pregnancy do cause harm to the foetus. Babies born to cannabis using mothers tend to be of lower weight and have a smaller head circumference. The degree of impairment is similar to that seen with cigarettes (Fergusson *et al* 2002).

There are concerns that babies exposed to cannabis in utero also acquire subtle changes to brain structure and functioning which persist into childhood (see Section 5.6). Rising rates of heavy cannabis use among young women in Ireland (see Section 3.3.1) indicate that the number of children borne following prenatal exposure to cannabis is on the increase.

8. Treatment for problem cannabis use

8.1 What are the aims of specialist services for problem cannabis use?

The aims of specialist services for problem cannabis use include
- Harm reduction – reducing the impact of cannabis on one's life
- Abstinence – stopping cannabis completely
- Relapse prevention – not starting to use cannabis again.

8.2 Models of psychological interventions for cannabis users

The process of psychological intervention includes individual, family or group therapy sessions. Most interventions used for cannabis dependence have been developed from alcohol dependence interventions (e.g., Miller & Gold 1989; Zweben & O'Connell 1992). The 12-step fellowship movements, including Alcoholics Anonymous and Narcotics Anonymous, have also been used by cannabis clients seeking assistance. Marijuana Anonymous is a developing program in the U.S. but has not yet been established successfully elsewhere.

The most promising interventions include Motivational Enhancement Therapy (MET) and Cognitive Behavioral Therapy (CBT). These Models of Psychological Interventions are manualised and freely available (Rees *et al,* 1998; Sampl & Kadden 2000; Cannabis Youth Treatment (CYT) (*www.samhsa.gov.)*.

In the past decade a number of randomized controlled trials of Cognitive Behavioural Therapy for cannabis dependence in which outcomes were confirmed by urinalysis for cannabinoids or collateral validation have been performed in the United States (Stephens *et al,* 1994) and Australia (Rees *et al*, 1998);

8.3 Rationale for CBT Treatment

Cognitive behavioral therapy (CBT) is designed to remediate deficits in skills for coping with antecedents to marijuana use. Individuals who rely primarily on marijuana (or other substances) to cope have little choice but to resort to substance use when the need to cope arises. The goal of

this intervention is to provide some basic alternative skills to cope with situations that might otherwise lead to substance use. Skill deficits are viewed as central to the relapse process; therefore, the major focus of the CBT groups will be on the development and rehearsal of skills.
It incorporates treatment elements that have demonstrated clinical effectiveness with alcoholic clients into a manual of interventions aimed at adolescents that can be reliably delivered, monitored, and evaluated. The focus of CBT treatment is on teaching and practicing overt behaviours, while attempting to keep cognitive demands on clients to a minimum. Repetition is essential to the learning process in order to develop proficiency and to ensure that newly acquired behaviors will be available when needed. Therefore, behavioral rehearsal will be emphasized, using varied, realistic case examples to enhance generalization to real life settings. During the rehearsal periods, clients are asked to identify cues that signal high-risk situations, indicating their recognition of when to employ newly learned coping skills.

Staff Requirements

Below are the recommended credentials and prior experience requirements for therapists delivering MET/CBT5:
• Therapists should have completed a graduate program for providing clinical mental health services or an addiction counseling certification program. Some individuals who have completed a bachelor's degree in an area related to mental health can become effective providers of MET/CBT5. However, it is likely that they will require more intensive training and supervision to achieve competency.

MET/CBT5 therapists.

- Therapists should have a minimum of 1 year's clinical experience working with adolescents.
- Therapist experience in the following areas is also desirable:
- Working with substance abuse issues
- Providing behavioral and/or cognitive behavior interventions
- Providing manual-based therapy.

Therapists with experience in these areas are likely to learn the MET/CBT5 intervention quickly.
The following recommended caseloads are considered ideal for implementing MET/CBT5 in a clinical setting.
One full group of six participants is likely to require approximately one-quarter of a full-time staff person's time (approximately 10 hours per week).

For a full-time person who is only seeing MET/CBT5 participants, it is recommended that the caseload be limited to 3 full groups (or 18 participants) rather than 4 full groups, because of the demands involved in keeping track of 18 adolescents' progress and in managing such a caseload. The groups should start on a staggered basis, rather than simultaneously.
In this way, the initial, heavy demand on clinicians' time to see each participant for two individual sessions will be spread out.

Staffing Recommendations

In the first 2 weeks of the treatment, the therapist sees each participant for two individual therapy sessions. Over the following 3 weeks, the therapist conducts one group therapy session per week. Additional clinician time may be needed to handle emergencies that may occur, to address pragmatic issues such as scheduling and communication, or to make referrals.
Additional staff is needed to conduct and score the initial assessments and prepare the personalized feedback reports. During a group therapy session, another staff person should be available in reasonable proximity to the group therapy room. This staff person (who may be doing other work) could assist in dealing with emergencies or supervising a client who has been asked to leave a group session because he or she is under the influence of drugs or exhibiting disruptive behavior. Details of the training which should be provided are included in *Appendix 1*.

Supervision and Monitoring Procedures

The therapists should receive 1 hour of supervision each week. Prior to certification, this supervision should be on an individual basis. All therapy sessions should be audio-taped or videotaped (with the consent of the adolescent participant and his or her parent/legal guardian). All therapists will need to demonstrate their competence in delivering MET/CBT5. The person providing the ongoing supervision may have participated as a trainer in the initial training of therapists; however, this in not necessary. It is crucial, however, that the clinical supervisor attends the training. The clinical supervisor should have at least 2 years' experience in delivering and supervising motivational enhancement and cognitive behavioral therapies for substance abusers and in treating adolescents. Experience in supervising manual-based therapies is desirable. If the supervisor has not had experience supervising manual-based therapies, it is recommended that he or she be provided with some related consultation and instruction. (See *Appendix 2* for further detail on supervision).

Sequence of MET/CBT5 Treatment

While the first two sessions proceed primarily from a motivational enhancement therapy plan, and the remaining three sessions focus primarily on cognitive-behavioral interventions, it is expected that there will be some overlap of each of these approaches in all five sessions. For example, it is expected that therapists will make effective use of MET interventions, to some extent, across all five treatment sessions. (See *Appendix 3* for more details of the content of sessions).

8.4 What is the rationale for Group Therapy for problem cannabis use?

Many of the problems or skill deficits associated with substance abuse are interpersonal in nature, and the context of a group provides a realistic yet "safe" setting for the acquisition or refinement of new skills. A number of features associated with group approaches to treatment may facilitate cognitive, affective, and behavioral changes. These factors include the realisation that others share similar problems; the development of adaptive social behaviors; the opportunity to try out new behaviours in a safe environment; and development and enhancement of interpersonal learning and trust. Group therapy breaks through individual's isolation, encouraging development of interdependence and identification with other cannabis users, while at the same time avoiding overdependence on the therapist. It also provides the therapist with an opportunity to observe the interpersonal behaviour of each group member.

With respect to social skills training, important aspects of the treatment, particularly modeling, rehearsal, and feedback, probably occur more powerfully in a group than an individual 1:1 setting.

A group-therapy format also provides opportunities for behavioural rehearsal and risk taking. Clients benefit from feedback offered by their peers, from discussions of anticipated obstacles to implementation of new skills, and from the case examples provided by fellow clients.

Group therapy is the most widely used form of treatment delivery for substance abuse rehabilitation and has a high level of clinical relevance. Group therapy is relatively inexpensive because of its relatively high client-to-staff ratio.

It can be a particularly powerful modality for teenage clients given the importance of peer influence in adolescence (Nowinski, 1990). Feedback from a peer is likely to have greater impact on adolescents than similar feedback from the therapist.

In the group CBT sessions, therapists encourage participants to offer other group members positive and constructive feedback. At the same time, clients are equally susceptible to the negative influence of peers. As a result, it is especially important that the therapist monitor and address any antisocial comments and behaviors that occur in group sessions.

A randomized controlled trial of brief cognitive–behavioral interventions for cannabis use disorder was carried out in Australia to address this issue (Copeland *et al,* 2001). A total of 229 participants were assessed and randomly assigned to a six-session CBT program (6CBT), a single-session CBT intervention (1CBT), or a delayed-treatment control (DTC) group. Participants were assisted in acquiring skills to promote cannabis cessation and maintenance of abstinence and were followed-up. Follow up was at a median of 237 days after last attendance. Participants in the treatment groups reported better treatment outcomes than the DTC group. They were more likely to report abstinence, were significantly less concerned about their control over cannabis use, and reported significantly fewer cannabis-related problems than those in the DTC group. Those in the 6CBT group also reported more significantly reduced levels of cannabis consumption than the DTC group. While the therapist variable had no effect on any outcome, a secondary analysis of the 6CBT and 1CBT groups showed that treatment compliance was significantly associated with decreased dependence and cannabis-related problems. These findings support the efficacy of CBT interventions for cannabis use disorders and speak to the need for larger, multi-site replication studies to address the question of generalisability and the problem of low statistical power

8.5 Manualised treatment

Manuals were designed (see Sampl & Kadden (2000); Webb *et al,* (2002) Hamilton *et al* (2001); Godley *et al* (2001); Liddle (2002)) to help train substance abuse treatment counselors to conduct a brief five-session treatment intervention for adolescents with cannabis use disorders presenting for outpatient treatment. It combines two sessions of motivational enhancement therapy provided individually and three sessions of cognitive behavioral therapy provided in a group format.

8.6 Integrated Treatment for Dual Disorders

Adults with substance abuse disorders and mental illness (i.e. those with a dual diagnosis) require a comprehensive set of approaches, including assessment, individual, group and family work that can be tailored to the specific needs of individual programmes. Mueser *et al,* (2003) summarise available knowledge on various treatment programs that have been researched in the dual diagnosis field separately and make recommendations on available individual interventions.

9. Conclusions

Cannabis is the most widely used illegal drug in western societies. Users of cannabis have tended to view it as quite a benign drug. There is growing evidence that cannabis is addictive, contrary to popular opinion. There is also growing evidence regarding the long term changes in brain functioning which cannabis can induce.

Unfortunately rates of cannabis use by young people in Ireland are high by European standards. Over one third of Irish schoolchildren have tried cannabis by the age of sixteen years. Nine per cent of Irish sixteen-year-olds use cannabis at least three times per month. While rates of use have historically been higher in boys, rates of use demonstrated by girls are now equal to those seen in teenage boys. Rates of cannabis use are lower in older age groups. Students attending third level education report relatively high rates of use compared to other groups. Most people access cannabis from friends and use in social situations with peers. About one in ten current cannabis users are dependent upon the drug. This suggests that there are about 28000 Irish people are currently cannabis dependent. There is a need for further research to examine this sub-group of heavy cannabis users in order to improve our understanding of the routes into and out of cannabis dependence.

Cannabis users are a heterogeneous group. A variety of individual, family and social risk factors are associated with increased risk of cannabis abuse. Peer and family attitudes to intoxication in general and cannabis use in particular are predictive of cannabis abuse by individuals.

Internationally, there has been substantial debate regarding the appropriate legislative and regulatory response to cannabis users. In the UK, cannabis was recently recategorised as a class C substance, having previously been a class B substance. In essence, this still means that cannabis use remains illegal, but use of a class C substance does not bring with it a criminal conviction. Surveys of Irish people indicate that the majority of Irish people do not want cannabis legalised. A substantial minority of past and current cannabis users do not wish to see cannabis legalised. Despite the existence of quite liberal laws on cannabis in the Netherlands, Irish teenagers demonstrate higher rates of cannabis experimentation than their Dutch counterparts. Although ‘coffee shops’ are permitted to sell cannabis in the Netherlands, it is estimated that

about two-thirds of the cannabis continues to be sold via criminal networks.

There is now compelling evidence that cannabis abuse can result in later development of psychotic illness. Prolonged exposure to cannabis can induce changes to neurotransmitter pathways in vulnerable people. It seems that these changes can result in serious illness such as schizophrenia in some and result in cognitive impairment in others. Unfortunately, we cannot currently predict which cannabis users will develop these difficulties and who will not. In recent years it has also become clear that the human brain continues to develop during adolescence. It appears that cannabis use during this developmental phase, when brain architecture relating to some higher functions is being fine tuned, is most likely to result in long term impairment. It is important that education regarding these emerging risks of cannabis use is communicated in a balanced manner. For example, while teenagers engaging in heavy cannabis use have a two- to four-fold increase in risk of later development of schizophrenia, the vast majority of such teenagers will not develop this disorder. While scare tactics have been popular in past public information campaigns on drug misuse, they are counter-productive.

There is also a need to support further neurobiological research to examine the long term cognitive impairment effects associated with heavy cannabis use, particularly those impairments relating to heavy use in adolescence and to prenatal exposure to cannabis.

Cannabis users encounter the same profile of serious respiratory disease as that seen in cigarette smokers. This includes an elevated risk of chronic obstructive pulmonary disease and lung cancer. Women who smoke cannabis during pregnancy tend to have smaller babies. There is emerging evidence that exposure of the foetus to cannabis during pregnancy can result in brain changes and can result in detectable cognitive impairment during childhood. As young women increase in their use of cannabis in Ireland, there is need for greater public health awareness of these risks.

Cannabis use contributes to a range of social harms in Ireland. After alcohol, it is the drug most frequently implicated in intoxication related road traffic accidents. Although cannabis does not generally cause users to become violent while intoxicated and contributes minimally to public order offences in Ireland, the illegal supply network involves violence and intimidation. It is estimated that the cannabis generates at least 375 million euro for criminals in Ireland each year. However, a heavy cannabis smoker can maintain their habit on about 70 euro per week. Just over six thousand prosecutions relating to cannabis were initiated

in 2005. This necessitates substantial use of garda and court resources. There is dispute regarding the relative importance of the deterrent effect of the criminal status of cannabis on its use. The physical, psychological and social adverse consequences of cannabis use probably have a greater deterrent effect on cannabis use in the population at large.

Young people in modern Ireland report easy access to cannabis and appear to have a broader menu of intoxicants than previous generations. The most widely abused substance in Ireland is alcohol. Binge drinking and drunkenness are highly tolerated across the age ranges in Ireland by international standards. This widespread drunkenness provides effective camouflage for people who chose to get intoxicated via other substances.

Despite higher prevalence of cannabis use in the greater Dublin area, rates of attendance for cannabis treatment are very low in Dublin compared to elsewhere in Ireland. While addiction treatment services in Dublin have provided a comprehensive response to heroin abuse, there is now a need for development of a treatment response for other substances, including cannabis. There is growing evidence regarding effective treatment approaches for cannabis dependence. Treatment should be delivered by professional staff skilled in the evidence based treatment approaches. The vast majority of people who are cannabis dependent can be treated on an outpatient basis. There is growing evidence regarding the neurobiology of addiction. There are high rates of comorbidity between cannabis dependence and other mental health disorders. Mental health professionals have all of the core skills required to deliver high quality addiction treatment. Consequently, we believe that addiction treatment services should be intergarted within a mental health services framework.

The Irish Government has never instituted a sustained public health education campaign on the health effects of cannabis. We need Government to recognise that cannabis is primarily a health issue, not a legal issue and to deal with it accordingly. Education regarding cannabis is required across society and should not be exclusively focused on teenagers or schools. Indeed, teenagers are probably better informed about the risks and consequences of cannabis use than are their parents (see Appendix 4).

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Appendix 1.

The recommended Training required by therapists providing Five sessions MET/CBT5.

The training should be provided by a graduate-level clinician (or a team of clinicians) experienced (minimum of 2 years) in providing, supervising, and training motivational enhancement and cognitive behavioral therapy for substance abusers. The trainer should also have at least 2 years of clinical experience with adolescents. The trainer should have extensive knowledge of the treatment manual contents. The training should include a variety of formats including the following:

- Instruction of rationale and procedures
- Observation of live and/or videotaped examples
- Active practice exercises with feedback.

By varying the formats and by including engaging visual aids, the trainer will be more likely to keep participants actively involved. To increase engagement and clarity, the trainer should welcome and encourage participants' questions and comments.

If MET/CBT5 therapy is to be used in a multi-site clinical research project, or in a multi-site agency where the intent is consistent delivery and enhanced cohesiveness, it is recommended that the initial training be centralized to one common site and session. This way the therapists at each site will have a common foundation from which to work. During the centralized training, they will have a chance to hear the comments and questions of therapists at other sites and thus will be exposed to a wider range of issues that may come up in applying the intervention. Another likely benefit of centralized training is the potential for it to generate cohesiveness and enthusiasm, whereby participating therapists get the feeling of being a part of the big picture. The trainer can help with this by making enthusiastic comments about being included among therapists who will implement this new therapy, as well as by encouraging participants to interact with those from other sites during practice exercises and breaks.

Appendix 2

Supervision and Monitoring Procedures recommended for therapist providing MET/CBT5.

The person providing the ongoing supervision may have participated as a trainer in the initial training of therapists; however, this in not necessary.
It is crucial, however, that the clinical supervisor attends the training. The clinical supervisor should have at least 2 years' experience in delivering and supervising motivational enhancement and cognitive behavioral therapies for substance abusers and in treating adolescents. Experience in supervising manual-based therapies is desirable. If the supervisor has not had experience supervising manual-based therapies, it is recommended that he or she be provided with some related consultation and instruction.
The therapists should receive 1 hour of supervision each week. Prior to certification, this supervision should be on an individual basis. All therapy sessions should be audio-taped or videotaped (with the consent of the adolescent participant and his or her parent/legal guardian). All therapists will need to demonstrate their competence in delivering MET/CBT5.
The two initial individual MET sessions are primarily intended to enhance adolescents' motivation to address their marijuana use and to prepare the clients for the group sessions, with an introduction to functional analysis and the concept of triggers. The purpose of the three group sessions is to assist clients in the development of skills useful for stopping or reducing marijuana use. The CBT sessions focus on the following skills:

- Learning basic skills for refusing offers of marijuana
- Developing a plan for pleasant drug-free activities
- Establishing a social network that will support recovery
- Coping with high-risk situations
- Recovering from a relapse, should one occur.

The table below illustrates the sequence of the five sessions of the MET/CBT5 treatment. Note that the first two (individual) sessions are expected to last for 60 minutes. The final three (group) sessions are scheduled to run for 75 minutes.

Appendix 3

Content of Sessions MET/CBT5.

Sequence of MET/CBT5 Treatment
Session Modality Time Primary Topics
Period Approach

- Session 1: Individual 60 min.

MET Rapport and motivation building.
Review of personalized feedback report.

- Session 2: Individual 60 min.

MET Goal setting.
Introduction to functional analysis.
Preparation for group sessions.

- Session 3: Group 75 min.

CBT Marijuana refusal skills, with role play practice exercises.

- Session 4: Group 75 min.

CBT Enhancing social support network
Increasing pleasant activities.

- Session 5: Group 75 min.

CBT Coping with unanticipated high-risk situations and relapses.
While the first two sessions proceed primarily from a motivational enhancement therapy plan, and the remaining three sessions focus primarily on cognitive-behavioral interventions, it is expected that there will be some overlap of each of these approaches in all five sessions. For example, it is expected that therapists will make effective use of MET interventions, to some extent, across all five treatment sessions.

Appendix 4

Prevention by raising awareness about Cannabis

Given the lack of awareness of parents and professional, an awareness campaign similar to that described by the Psychological Society of Ireland Presidential Advisory Group on the Public Understanding of Psychology (PAGOTPUP), may prove effective, (Hughes, B., Adelaja, Y., Carroll-Phelan, B., *et al* 2005).

Their list of strategies to increase awareness included:

Websites:

Given the openness of Ireland to international cultural influences, many Irish residents' perceptions of the role of psychologists are shaped more by professional realities in countries such as the US and the UK than they are by the profession here. For example, in a society where many people's primary source of information on psychological matters is either the Internet or imported television shows.

Secondly, it appears to be the case that there is a gap in that parents leave education about cannabis to professionals and professionals leave awareness about cannabis to parents. This research does not distinguish among professional specialisms (e.g., clinical psychology, counseling psychology, educational psychology, health psychology, teachers or General practitioners).

The general public

Notwithstanding the wisdom of targeting specialised audiences, it is clearly important to seek to address a global public audience with initiatives that enhance their understanding of the difficulties associated with cannabis use.

Allied pressure groups

Some members of the general public are involved in (or else are particularly sensitive to) single-issue pressure groups and campaigns. Members of the public concerned about psychological issues such as suicide, addictions, special educational needs, bullying, and so on, will be especially motivated to receive information on psychology and psychologists, and so generically designed public understanding interventions may be sub-optimally focused for such audiences.

Allied professionals

Experience suggests that allied professionals are often quite amenable to psychology as a profession or discipline, but that their receptiveness to it is tempered by a lack of understanding across most of the areas identified above. Given that allied professionals have existing network contacts with psychologists, successful initiatives to improve understanding ought to capitalise on these relationships. It should be noted that although important in relation to psychology in the health services, the targeting of initiatives to allied professionals should not be exclusive to health settings. Educational psychologists, organisational psychologists, and academic psychologists also occupy work settings that are characterised by a high degree of interaction with other professionals.

Government departments and state agencies

As psychologists working for the state can testify, it would be a mistake to assume that organisations of state which are ultimately responsible for overseeing psychology training, service availability, or funding (including research funding) are sophisticated in their understanding of what psychological difficulties and interventions involves. However, given the oversight roles they occupy, initiatives to improve their understanding should be designed specifically with their organisational perspective in mind.

The media

The media will inevitably be involved, directly and indirectly, in a good deal of the understanding and misunderstanding of substance misuse including cannabis. Experience suggests that there is substantial scope for improvement in the way in which the media reports on cannabis use and its effects. The media as a profession are continuously receptive to briefings and appear ever keen to enhance their understanding of the specialist areas on which they report.

School students

There are at least two reasons why school students represent a separate sub audience to which particular initiatives should be directed. Firstly, school students are the main source of concern in relation to cannabis use, and their approval or disapproval influences cannabis use. Secondly, school children can represent a vehicle for the promotion of the understanding of the difficulties associated with cannabis use among the wider public, by being an easily accessed group with immediate links via

parents and families to the community at large. There is also a sense in which it can be seen as valuable to inform members of the public about the risks associated with cannabis misuse while they are still young, prior to their exposure to the extensive misinformation that appears to circulate widely about "the weed".

Psychologists

Psychologists represent a perhaps unexpected target audience for efforts to promote the public understanding of the risks associated with cannabis use. However, there are three contexts in which attention may be directed at psychologists themselves.

- Firstly, undoubtedly some psychologists fall foul of some of the misconceptions about the risks associated with cannabis use.
- Secondly, in the era of Continuing Professional Development, it is incumbent on professional bodies to keep (or help to keep) their members abreast of emerging developments in the emerging research on cannabis so that their understanding of it is maintained at a sophisticated level.
- And thirdly, it would appear that many psychologists seem to underestimate the extent of cannabis use, and the potential damaging effects, of the public's current misunderstanding of the risks associated with cannabis use.

Part of the endeavour to enhance public understanding will be to inform psychologists themselves of the pertinent issues concerning public understanding, and to involve them in awareness-raising as ambassadors for their discipline.

Modalities of understanding-enhancement efforts

The variety of misconception and target audience suggests that a number of different ways of improving public understanding of cannabis use and the risks associated therewith can be considered.

Leaflets and pamphlets

By far the most commonly suggested format for understanding-enhancement efforts was the production of appropriate leaflets, pamphlets, or fact-sheets. It seems true that such leaflets remain extremely common despite the potentially elaborate alternatives offered by our multimedia technological age. For example, many of our sister

professions invest much energy (and finances) in the production of information leaflets, presumably having considered various other options. The prevalence of leaflets (as would be evidenced by the vast number of leaflets relating to professional services and health concerns available in the public waiting areas of health-care institutions) would imply that members of the public would be very familiar with such a format

The notion of a "pamphlet" may represent something more substantial than a leaflet. Such a product may be used to represent some of the detail required to reach particular target audiences with relevant information. For example, the enhancement of understanding of cannabis and its side effects among state agencies may not be adequately addressed through a simple leaflet.

Web-based information

Where leaflets are produced, it is necessary in the modern era to make such materials available online. This could mean that all leaflets should be downloadable from a website. A thorough and comprehensive information store, easily navigable and referenced to a Frequently Asked Questions section, would appear to be a basic minimum requirement for a modern society concerned about cannabis use. Compared to paper-based media, the associated financial costs and problems with in-built obsolescence are minimal.
It is likely that members of the public who are motivated to proactively seek out information on cannabis would access such a site. However, the availability of online resources will not completely achieve the objective of enhancing public understanding on its own.

Public lectures

The holding of public lectures on cannabis use offers a relatively low-cost but potentially fruitful way of addressing a number of target audiences, especially those who may not be reached via electronic or paper modalities. A series of public lectures around the country may be helpful.

Exhibitions

The notion of an exhibition, of exhibition stands, or of an "open day"-type event could be invoked to access particular target audiences such as school students or other professions e.g. an exhibition or information-stand at the annual conferences of professional bodies.
As regards reaching the general public, there would appear to be several opportunities for education re cannabis to be represented at larger scale

events run by other organisations. For example, such events might include the Young Scientists Exhibition or the *Irish Times* Higher Options Conference (the annual exhibition, held in Dublin, aimed at helping school-leavers choose courses at third level). As well as reaching delegates, it is notable that these events attract a considerable degree of media coverage. The fact that such exhibitions are well-established national events should offset the cost.
It can be noted that during its centenary year, the British Psychological Society organised a number of such events across the UK, involving major arts bodies and institutions (e.g., art exhibitions at major galleries). The relationship between mental health and artistic work is very ingrained in the public imagination, and so it is possible to conceive of such events being organised around a wide range of arts and media.

Press Officer

The appointment of a Press Officer may be fruitful in addressing the understanding of cannabis through the media.

Press articles and other media contributions

A concerted effort could be made to secure regular columns or sections on cannabis in the national media. Most national newspapers produce weekly or monthly health and education supplements, which frequently carry articles on substance abuse themes. Similarly, most also run regular sections on science.
Specialist industry periodicals, such as magazines whose circulation is restricted to a given profession (e.g. *The Medical Times*), or similarly specialised websites (e.g., irishhealth.com) may also be approached in a similar manner.
Finally, a similar effort could be made to apprise other media (e.g. TV and radio) of the availability of contributors with an interest in psycho-education re cannabis.

Media guidelines

As well as liaising personally with the media on specific issues, it may be useful to issue reporting guidelines on cannabis use and the consequences of such use.

Posters
Some well designed and modern posters aimed at raising awareness about the effects of cannabis use similar to those used in Australia and America.

Conclusion

It is probably the case that public misunderstanding of the safety of cannabis use can never be fully addressed, and that the promotion of public understanding will be a permanent function of any group attempting to raise awareness.

Appendix B

Membership of the Joint Committee on Arts, Sport, Tourism, Community, Rural and Gaeltacht Affairs

An Comhchoiste um
Ghnóthaí Ealaíon,
Spóirt, Turasóireachta,
Pobail, Tuaithe agus
Gaeltachta

Teach Laighean
Baile Átha Cliath 2

Joint Committee on Arts, Sport, Tourism, Community, Rural and Gaeltacht Affairs
Leinster House
Dublin 2
☎ (01) 618 3000
Fax (01) 618 4123 / 618 4124

Members of the Joint Committee

Deputies:

Martin Brady (FF)
James Breen (Ind)
Michael Collins (Ind)
Jimmy Deenihan (FG)
Jim Glennon (FF) [Vice-Chairman]
Cecilia Keaveney (FF) [Chairman]
Peter Kelly (FF)
Dinny McGinley (FG)
Brian O'Shea (Lab)
Jack Wall (Lab)
G.V. Wright (FF)

Senators:

Brendan Daly (FF)
Frank Feighan (FG)
Joe McHugh (FG)
Labhrás Ó Murchú (FF)
Joe O'Toole (Ind)
Kieran Phelan (FF)

Appendix C

Orders of Reference of the Joint Committee

Orders of Reference

Dáil Éireann on 16 October 2002 *ordered*:

"(1) (*a*) That a Select Committee, which shall be called the Select Committee on Arts, Sport, Tourism, Community, Rural and Gaeltacht Affairs, consisting of 11 members of Dáil Éireann (of whom 4 shall constitute a quorum), be appointed to consider -

(i) such Bills the statute law in respect of which is dealt with by the Department of Arts, Sport and Tourism and the Department of Community, Rural and Gaeltacht Affairs;

(ii) such Estimates for Public Services within the aegis of the Department of Arts, Sport and Tourism and the Department of Community, Rural and Gaeltacht Affairs; and

(iii) such proposals contained in any motion, including any motion within the meaning of Standing Order 157 concerning the approval by the Dáil of international agreements involving a charge on public funds,

as shall be referred to it by Dáil Éireann from time to time.

(*b*) For the purpose of its consideration of Bills and proposals under paragraphs (1)(*a*)(i) and (iii), the Select Committee shall have the powers defined in Standing Order 81(1), (2) and (3).

(*c*) For the avoidance of doubt, by virtue of his or her *ex officio* membership of the Select Committee in accordance with Standing Order 90(1), the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs (or a Minister or Minister of State nominated in his or her stead) shall be entitled to vote.

(2) (*a*) The Select Committee shall be joined with a Select Committee to be appointed by Seanad Éireann to form the Joint Committee on Arts, Sport, Tourism, Community, Rural and Gaeltacht Affairs to consider -

(i) such public affairs administered by the Department of Arts, Sport and Tourism and the Department of Community, Rural and Gaeltacht Affairs as it may select, including, in respect of Government policy, bodies under the aegis of those Departments;

(ii) such matters of policy for which the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs are officially responsible as it may select;

(iii) such related policy issues as it may select concerning bodies which are partly or wholly funded by the State or which are established or appointed by Members of the Government or by the Oireachtas;

(iv) such Statutory Instruments made by the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs and laid before both Houses of the Oireachtas as it may select;

(v) such proposals for EU legislation and related policy issues as may be referred to it from time to time, in accordance with Standing Order 81(4);

(vi) the strategy statement laid before each House of the Oireachtas by the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs pursuant to section 5(2) of the Public Service Management Act, 1997, and the Joint Committee shall be so authorised for the purposes of section 10 of that Act;

(vii) such annual reports or annual reports and accounts, required by law and laid before either or both Houses of the Oireachtas, of bodies specified in paragraphs 2(a)(i) and (iii), and the overall operational results, statements of strategy and corporate plans of these bodies, as it may select;

Provided that the Joint Committee shall not, at any time, consider any matter relating to such a body which is, which has been, or which is, at that time, proposed to be considered by the Committee of Public Accounts pursuant to the Orders of Reference of that Committee and/or the Comptroller and Auditor General (Amendment) Act, 1993;

Provided further that the Joint Committee shall refrain from inquiring into in public session, or publishing confidential information regarding, any such matter if so requested either by the body or by the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs; and

(viii) such other matters as may be jointly referred to it from time to time by both Houses of the Oireachtas,

and shall report thereon to both Houses of the Oireachtas.

(*b*) The quorum of the Joint Committee shall be five, of whom at least one shall be a member of Dáil Éireann and one a member of Seanad Éireann.

(*c*) The Joint Committee shall have the powers defined in Standing Order 81(1) to (9) inclusive.

(3) The Chairman of the Joint Committee, who shall be a member of Dáil Éireann, shall also be Chairman of the Select Committee.".

Seanad Éireann on 17 October 2002 ***(*23 October 2002) ordered*****:**

(1) (a) That a Select Committee consisting of 6 members[*] of Seanad Éireann shall be appointed to be joined with a Select Committee of Dáil Éireann to form the Joint Committee on Arts, Sport, Tourism, Community, Rural and Gaeltacht Affairs to consider-

(i) such public affairs administered by the Department of Arts, Sport and Tourism and the Department of Community, Rural and Gaeltacht Affairs as it may select, including, in respect of Government policy, bodies under the aegis of those Departments;

(ii) such matters of policy for which the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs are officially responsible as it may select;

(iii) such related policy issues as it may select concerning bodies which are partly or wholly funded by the State or which are established or appointed by Members of the Government or by the Oireachtas;

(iv) such Statutory Instruments made by the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs and laid before Houses of the Oireachtas as it may select;

(v) such proposals for EU legislation and related policy issues as may be referred to it from time to time, in accordance with Standing Order 65(4);

(vi) the strategy statement laid before each House of the Oireachtas by the Minister for Arts, Sport and Tourism and the Minister for Community, Rural and Gaeltacht Affairs pursuant to section 5(2) of the Public Service Management Act, 1997, and the Joint Committee shall be so authorised for the purposes of section 10 of that Act;

(vii) such annual reports or annual reports and accounts, required by law and laid before both Houses of the Oireachtas, of bodies specified in paragraphs 1(a)(i) and (iii), and the overall operational results, statements of strategy and corporate plans of these bodies, as it may select;

[*] by the substitution of '6 members' for '4 members'.

Provided that the Joint Committee shall not, at any time, consider any matter relating to such a body which is, which has been, or which is, at that time, proposed to be considered by the Committee of Public Accounts pursuant to the Orders of Reference of that Committee and/or the Comptroller and Auditor General (Amendment) Act, 1993;

Provided further that the Joint Committee shall refrain from inquiring into in public session, or publishing confidential information regarding, any such matter if so requested either by the body concerned or by the Minister for Arts, Sport and Tourism or the Minister for Community, Rural and Gaeltacht Affairs;

and

(viii) such other matters as may be jointly referred to it from time to time by both Houses of the Oireachtas,

and shall report thereon to both Houses of the Oireachtas.

(*b*) The quorum of the Joint Committee shall be five, of whom at least one shall be a member of Dáil Éireann and one a member of Seanad Éireann.

(*c*) The Joint Committee shall have the powers defined in Standing Order 65(1) to (9) inclusive.

(2) The Chairman of the Joint Committee shall be a member of Dáil Éireann.