College of Psychiatrists of Ireland

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Submission to the Citizens' Assembly on Drugs Use

The College of Psychiatrists of Ireland

June 2023

The College of Psychiatrists of Ireland and Psychiatry

The College of Psychiatrists of Ireland (CPsychI) is the professional and training body for psychiatrists (specialist doctors) in the Republic of Ireland. Its mission is to promote excellence in the practice of psychiatry. It is the sole body recognised by the Medical Council and the HSE for the training of doctors to become specialists in psychiatry and for the continuing assurance of the career-long competence of specialists in psychiatry. To become a specialist doctor in psychiatry takes at least seven years after completion of an intern year which follows successful graduation from a medical school.

Psychiatry is the branch of medicine which is concerned with the understanding, assessment, diagnosis and treatment of disorders of the mind. These disorders can involve emotions, behaviour, perceptions and thinking. Specialist (consultant) & trainee psychiatrists work in a number of different places including hospitals, people's own homes, residential centres, older people's homes and prisons. There are many areas of specialism in Psychiatry such as Psychiatry of Later Life, General Adult Psychiatry, Child & Adolescent Psychiatry and Addictions Psychiatry.

The College welcomes the Citizens' Assembly on Drugs Use and is available to participate and contribute to the work of the Assembly, particularly in terms of the health and mental health services experience, expertise and knowledge of our specialist doctor members.

This submission includes recommendations (at the beginning and in a summary document) for consideration by members of the Citizens' Assembly, followed by comprehensive and fully referenced detail and background to those recommendations, using up to date information from Ireland and international sources.

The recommendations are outlined in 4 domains:

1. **Prevention**
2. **Early Intervention**
3. **Treatment**
4. **Legislation**

The recommendations are followed by a background section which includes drug use patterns; chronic harms; acute health consequences; prevention programmes and strategies; treatment models and legislative options to reduce harms.

Content

Recommendations

1. Prevention

Public Health Messaging, Education & Prevention Models

- There is a need for a well-funded public health campaign to warn about dangers of drug use, with a particular focus on parents and young people who have little knowledge about the risks.

- There should be specific campaigns targeting cocaine use, given the substantial rise in use and related harms across Ireland in the past decade.

- There is an urgent need for stronger public health messaging across the entire population regarding the adverse health effects of cannabis, with an emphasis on reducing initiation and frequency of cannabis use among adolescents; use among women who are pregnant or contemplating pregnancy; and avoiding cannabis-impaired driving.

- There is a need for clarity regarding what entity or organization has lead responsibility for primary prevention of drug use in Ireland.

- There is an urgent need for the full roll out of the SPHE Module on substance use, at both junior and senior cycles. There should be annual reports updating on the proportion of schools and students who receive this education.

- The Icelandic Prevention Model for Substance Use (the Planet Youth study programme) should be rolled out across the country with national funding.

- Currently in Ireland, Special permission can be granted to some specific patient groups (such as children with rare forms of childhood onset epilepsy) to access cannabis/cannabinoid-based products. Cannabis-based medicines are regulated by the appropriate body, the Health Products Regulatory Authority (HPRA) (e.g., Sativex, Epidiolex). To avoid confusion, we recommend that the term 'medical cannabis' not be used.

2. Early Intervention

Early discouragement of drug use through increased awareness and communication of dangers, and implementation of specifically targeted programmes of care

- Drug use, should be strongly discouraged especially by persons most vulnerable to adverse mental health effects such as youth and those with personal or family history of mental disorders.

- There is a need for a greater communication of the dangers of drug use, including cannabis use during pregnancy. This information campaign could be targeted at young women and pregnant women and led by the maternity services, well women clinics and public health clinics.

- There should be urgent recognition of the needs of children of parents with substance use issues. A programme similar to "Children First" should be developed so that there is mandatory enquiring about the wellbeing of children when any adult with children presents to addiction services or any health service. Intervention should be rapidly initiated if children are deemed to be at risk. Full support should be provided to "Hidden Harms" and "Parents under Pressure" who already operate in this area.

• Steps should be taken to address the lack of public understanding of drug dependence and risks related to use of opioid-containing tablets, (e.g., Nurofen+, Solpadeine, tramadol), with females appearing to be particularly vulnerable to this addiction.

• There is a need for a programme (such as a Clinical Care programme) to provide addiction nurses and other staff in Emergency Departments (ED) and in general hospitals. This is an important site for early intervention and has been shown to be effective in general hospitals with the alcohol nurse initiative. Education and training in addictions should be available to all ED staff.

• More training should be provided for general practitioners (GPs) in the area of addiction and GPs should have easy access to a range of supports.

• There should be full implementation of the HSE National Traveller Action Plan

• To reduce drug-related deaths there is an urgent need to also focus efforts on reducing the growing proportion of non-injection related poisoning deaths and non-overdose deaths such as suicidal behaviours

3. Treatment

Resourcing and nationwide Implementation of accessible, evidenced based models of care, treatments and recovery supports

• Accessible, comprehensive and evidence-based treatment should be provided to adolescents suffering from drug use disorders or any other drug induced health problem. There is a need to fully resource the Tier Three Adolescent Addiction Services across all of Ireland. Mental health comorbidities highlight the value for addiction treatment teams including staff with skills in the areas of assessing and responding to developmental disorders.

• Accessible, comprehensive and evidence-based treatment should be provided to adults suffering from drug use disorders or any other drug induced health problem. There is a need to fully resource the Tier Three Adult Addiction Services across all of Ireland, with an increased focus on recovery and psychosocial aspects of treatment and trauma-focussed care.

• There is an urgent need to build capacity in Ireland for recovery supports such as Recovery Communities.

• More GPs should be encouraged and incentivised to provide methadone services as some parts of the country are lacking in this regard.

• There should be full resourcing of the proposed pilot sites delivering the new HSE Model of Care in Dual Diagnosis. Following the pilots, there should be urgent progression to full roll out of the model nationally. There is also a need for recognition that further development of this model may be needed to allow full integration and parallel assessment and treatment of people with mental health disorders and drug use problems.

• There is an urgent need for adequate resourcing of the full spectrum of residential services for drug use. Needs across the population will vary over time therefore capacity for each component should keep pace with population need. Currently, there are difficulties in specific areas such as sourcing of stabilization beds and also settings for 'secondary residential treatment' for under 18s.

- There is a need for more residential addiction services for mothers with young children.

- There is need for greater co-ordination between the mental health, physical health and addiction services in providing care for comorbidities in the ageing population with opioid dependence.

- People experiencing homelessness exhibit high rates of addiction and medical co-morbidities. This vulnerable population will require substantial co-ordination between homeless services, addiction services and mental health services.

4. Legislation

Working Group on possession of Drugs for Personal Use and emerging evidence from other jurisdictions

- CPsychI endorses the recommendations of the Working Group on Possession of Drugs for Personal Use (2019). This includes the implementation of a Health Diversion programme. We call on the Government to address any barriers preventing the progress of this approach and to set up the Health Diversion Programme as a matter of urgency. Once this is in place, the benefits or otherwise of such an approach should be carefully evaluated.

- CPsychI considers that imprisonment is not warranted for individuals solely for possession of small amounts of any illegal drug for personal use.

- CPsychI is very concerned by the evidence emerging from certain states in North America of increases in cannabis-related health harms following legalisation of cannabis in those locations. For this reason, CPsychI would have grave concerns about any move towards legalisation of cannabis or other drugs in Ireland.

Background

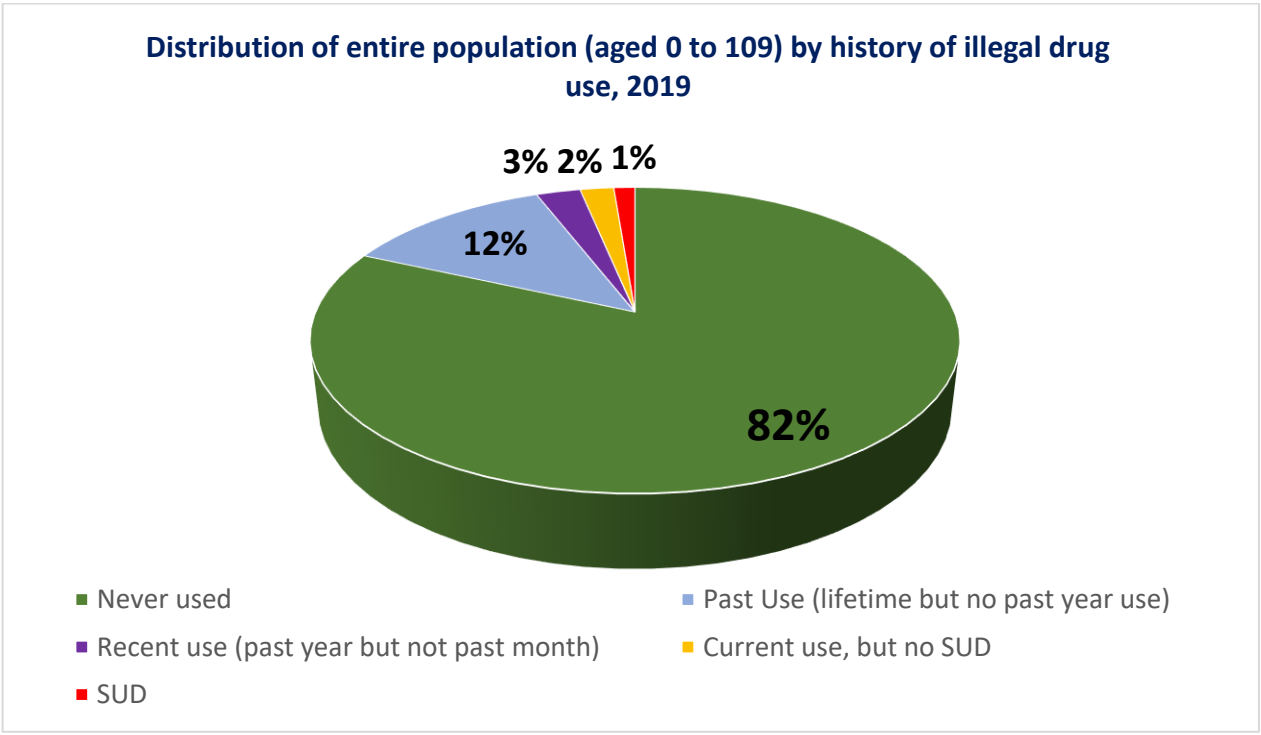
Drug Use – A Concern for Public Health

What is the prevalence of drug use in Ireland?

The most recent survey of the Irish general population regarding drug use was conducted in 2019/20 by the Health Research Board (HRB) (Mongan et al., 2021). This survey included a random selection of Irish people aged 15 years and older. It gives an estimate of the number of people who use illegal drugs (PWUD).

Among PWUD, there are infrequent users. These are people who used in past year but not in past month, which is referred to as 'recent use'. About 3% of the entire Irish population fit into this category (see Figure 1). There are current users who have used in the past month which is also about 3% of the entire population. About a third of PWUD within the past month will meet criteria for a substance use disorder (SUD). This equates to about 65,000 people in Ireland which is about 1% of the entire population.

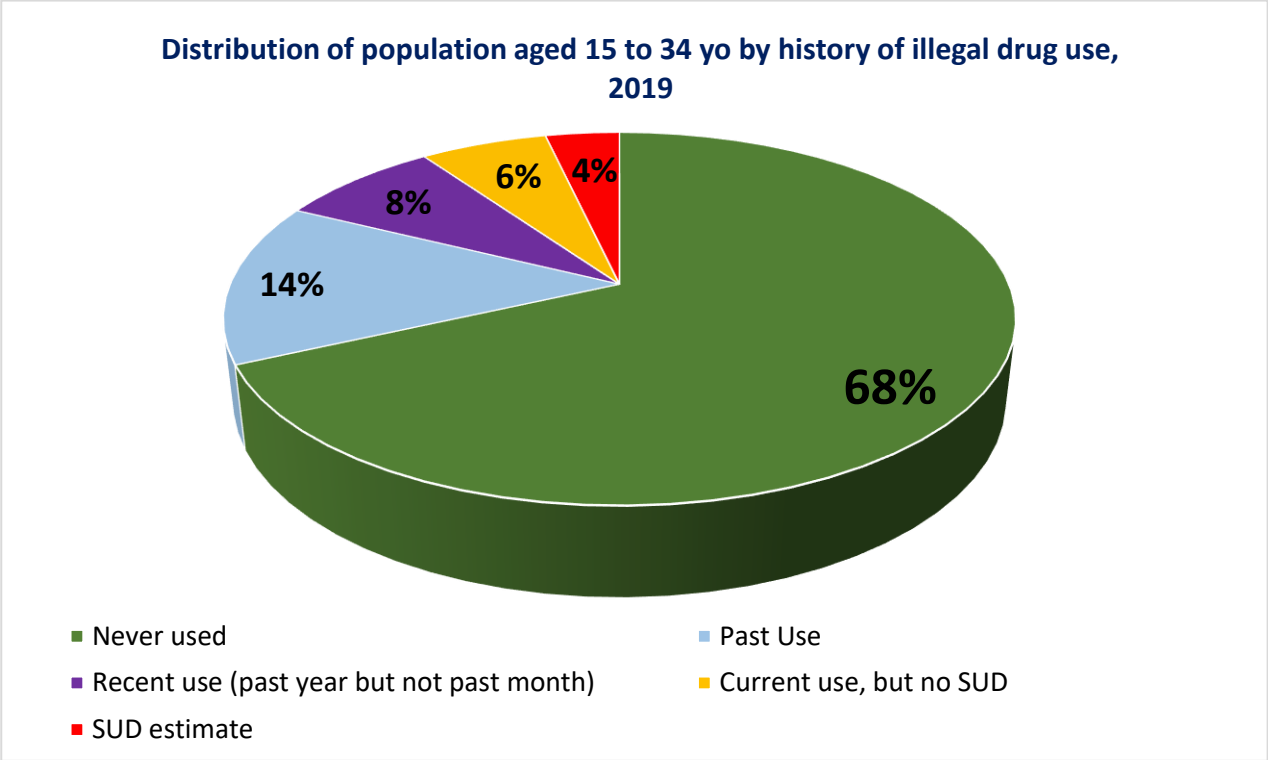
Figure 1.



Young adults report the highest rates of drug use. Among this group, about two-thirds report having never used any illegal drug (Figure 2) (Mongan et al., 2022b). About one in ten have used a drug in the past month, and about one third of these PWUD will have a SUD.

Drug use is a risk behaviour which can lead to health problems, like riding a motorbike without a helmet. For each of these behaviours some people will get away without any adverse health outcome and others will unfortunately suffer problems. Drug use is not a health problem in itself. A SUD is a health problem which can arise for some people who use drugs especially if they engage in frequent drug use.

Figure 2.



As Figure 1 shows, the vast majority of people in Ireland have never used a drug. About a quarter of this group, or over 1,000,000, who have never used are children. Drug policy should serve all of society. Road safety and driving policy considers everyone, not just people who are engaging in the risky behaviours and which we are trying to reduce, such as speeding & drink driving. We have road safety policy because we are trying to reduce health problems like injuries & deaths. As a society we develop a drug policy for similar reasons. We are trying to keep to a minimum the number of people who develop health problems arising from drug use (Fischer et al., 2022, Copello et al., 2010, Galligan and Comiskey, 2019). To achieve this, we strive to keep the number of PWUD to an absolute minimum in order to reduce the health problems which can flow from drug use. We want those 1,000,000 children to grow up with minimal use of any drug, while accepting that some will inevitably use. People who run into health problems arising from their drug use, such as addiction, overdose, drug induced psychosis, to get prompt high quality treatment.

Constructing drug policy is consequently very challenging. There are no 'silver bullets' or quick fixes. At one end of the spectrum a policy must endeavour to minimise the number of children who head down the path of drug use as they journey through adolescence and into adulthood, which is referred to as primary prevention. At the other end of the spectrum, policy must provide responsive, accessible trauma informed health responses to people who have been caught up in severe and very high-risk addiction.

Motivations for drug use

Cannabis is the most widely used illegal drug (Mongan et al., 2021). In a recent Irish study, the most common motivations for cannabis use were “to reduce stress”, “to get high”, “to improve sleep” and “to [self-]treat depression/anxiety” (Mongan et al., 2022b). It is concerning that coping motivations are so prominent in marked contrast to cocaine and MDMA where pleasure seeking motivations predominate. Also, many of the reasons people cite for using cannabis are actually problems which cannabis can itself cause, such as via withdrawal symptoms (Connor et al., 2022, Gobbi et al., 2019). The most common cannabis withdrawal symptoms are irritability, anxiety, insomnia, decreased appetite, restlessness and depressed mood (Connor et al., 2022).

In spite of growing evidence of cannabis harms, it is concerning that both Irish adolescents and Irish adults in 2019 are less likely to view regular cannabis use as posing risk than their counterparts in 2011, as shown in the figures 3 and 4 below (Mongan et al., 2021, Group, 2020). There has been very substantial pro-cannabis messaging across mainstream and social media in the past decade, much of it promoting cannabis as a “medicine” (Cohn et al., 2023). This may be fuelling a perception that cannabis is low risk and adding to beliefs that it has medical utility for treatment of mental health symptoms (Chabrol et al., 2020, Willoughby et al., 2023).

As yet, there is insufficient evidence to recommend any cannabinoid-based product in treatment for any psychiatric disorder (Black et al., 2019, APA, 2019).

The College of Psychiatrists is concerned by this trend of declining perceived risk of cannabis use. There is currently no government funded organization that has a clear national lead role in primary prevention of cannabis or other drug use in Ireland. In an effort to address this gap for cannabis, the College developed a suite of information documents, ‘*Effects of Cannabis on Mental Health’, (Ireland, College of Psychiatrists, 2021).*

Figure 3.

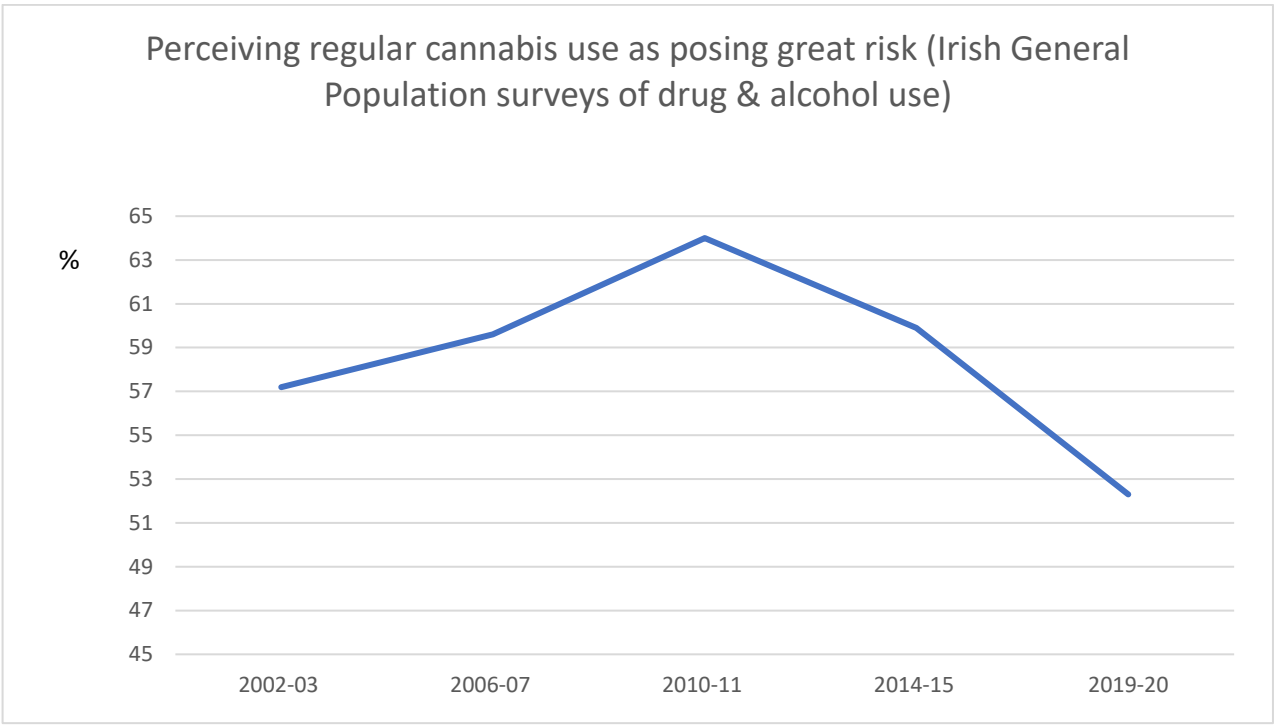
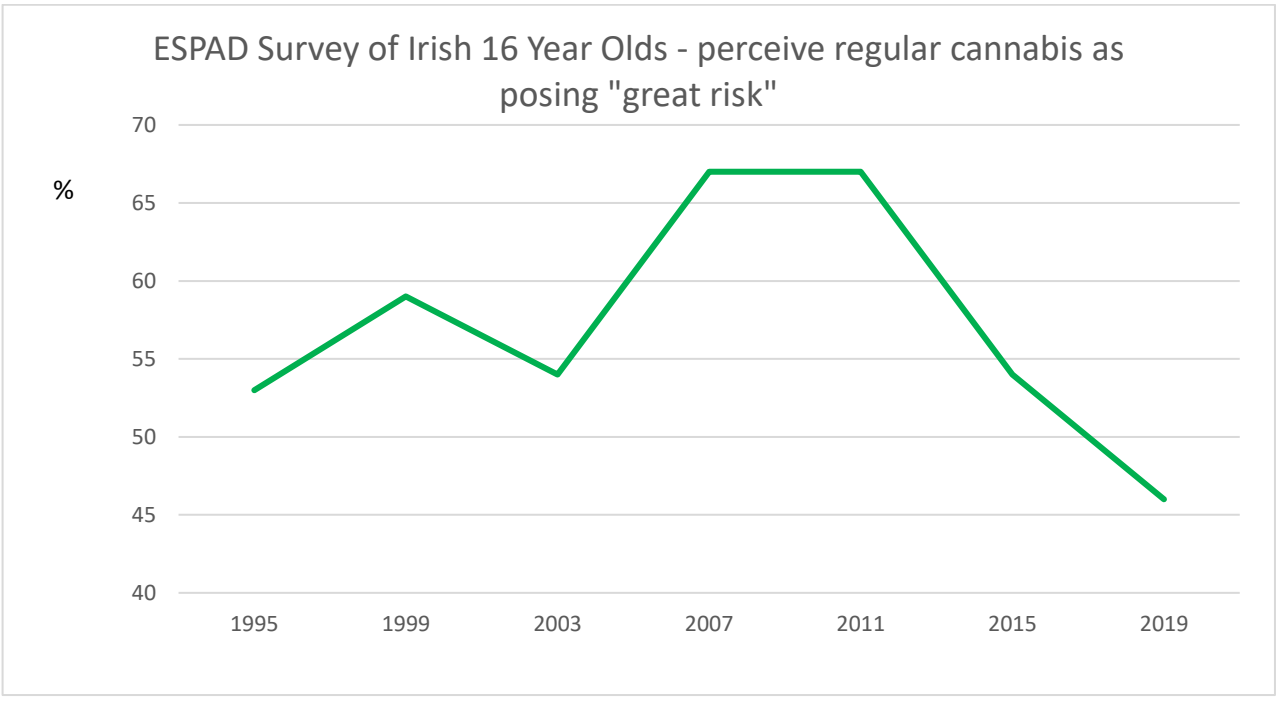


Figure 4



Prevention

Prevention operates at different levels. Most simply, there is primary prevention and secondary prevention. In the former, efforts are made to persuade as many people as possible, especially children, to avoid drug use altogether. Secondary prevention targets those who have commenced some drug use and seeks to avoid it from escalating into a pattern of regular use.

A key focus on work in prevention relates to the identification of risk and protective factors related to drug use. Once identified, efforts are made to reduce the prevalence of risk factors and to increase the presence of protective factors. Efforts are made to ensure people, especially younger people, have accurate information of risks and reasons for avoiding drug use.

Prevention is certainly possible in the area of substance use. Ireland has achieved dramatic reductions in cigarette smoking in the past 25 years among teenagers (EMCDDA and ESPAD, 2016). For illegal drugs, we have managed to greatly reduce the incidence of heroin addiction among young people who reside in the areas of deprivation and which were blighted by the heroin epidemic of the 1990s and early 2000s (Smyth and McCarney, 2020).

School is an important setting in which information about drug and alcohol use can be provided to adolescents. There are modules on alcohol and drug use in both senior cycle and junior cycle components of the SPHE program in schools. The drug and alcohol information has been updated in recent years. The extent to which schools are successfully delivering these programs is unclear. An evaluation of that implementation is due to occur in the next year and is welcome.

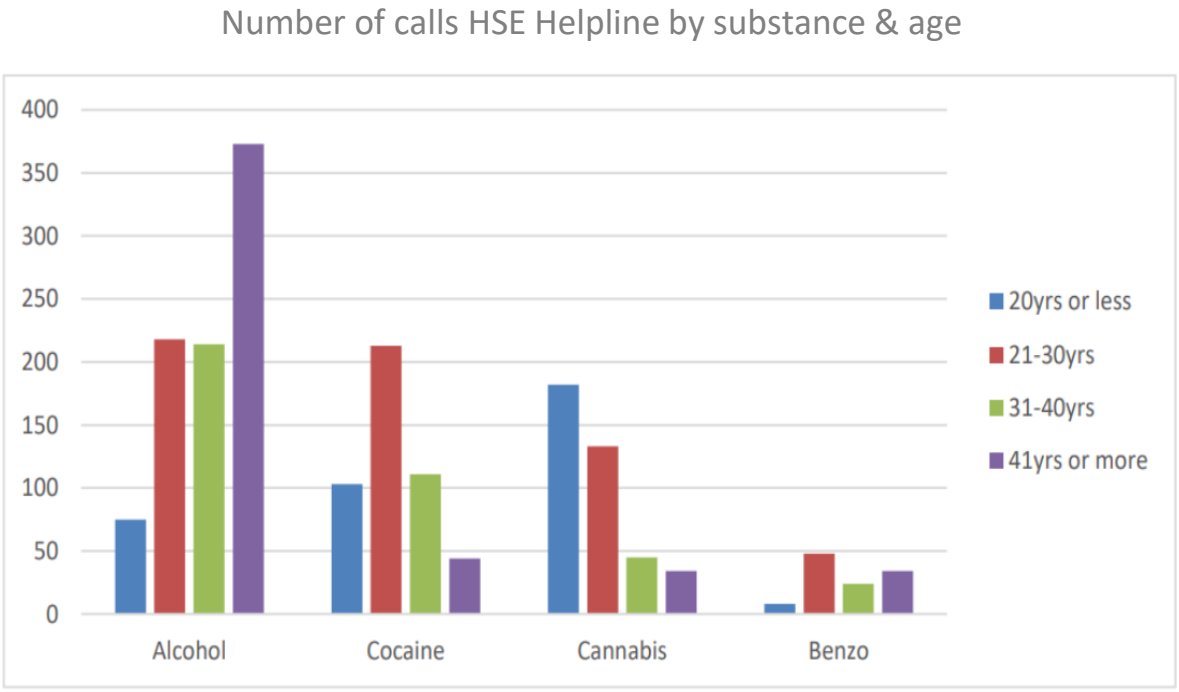
The Planet Youth model of prevention has been developed in Iceland. It has delivered major reductions in substance use there (Kristjansson et al., 2020, Kristjansson et al., 2016). Globally, many locations have begun to replicate the model. It is being rolled out at present in the west of Ireland and in parts of the north east. Ultimately this model simply seeks to identify the risk and protective factors present within communities and then builds a coalition of stakeholders, who then undertake efforts to bolster protective factors and reduce risk factors. It remains to be seen if it will be as effective outside of Iceland but it there is good reason to be optimistic.

The recent survey of students in third level institutions in Ireland highlighted concerning levels of drug use among that group (Byrne et al., 2022b). That survey also showed that students over estimate the extent to which their fellow students use drugs. People who believe that use is widespread are more likely to then use drugs themselves. These findings highlight the need for specific primary and secondary prevention efforts in this setting.

What are the drug problems generating concern among the people of Ireland?

The HSE Drug & Alcohol Helpline provides advice to people who have concerns about their own substance use or the substance use of a loved one. It is an important first point of contact for people who have concerns. This gives us an insight into what substances are causing problems across society. Figure 5 is taken from the 2023 annual report of the helpline and it shows the profile of substances, by age group (and call numbers). In calls relating to people below 20 years old cannabis is by far the biggest substance of concern. Among people in their 20s, cocaine is slightly ahead of cannabis, and over the age of 30 cocaine is the main drug issue reported. Calls regarding alcohol increase with increasing age. Alcohol accounts for the vast majority of calls relating to those over 40 years of age.

Figure 5.



Profile of drugs generating demand for addiction treatment

In 2021 there were 4,206 people presenting with a drug problem who entered their first ever episode of addiction treatment in Ireland. A further 3,026 presented with a primary alcohol problem. Co-existence of drug and alcohol problems is increasingly seen in addiction settings in Ireland. Given the overlaps between these issues, all addiction treatment settings should be able to respond to both alcohol and drug use disorders.

Among those who presented with a primary drug problem, cocaine (38%) and cannabis (35%) were by far the individual substances generating most demand for addiction treatment (Figure 6). While heroin was the main driver of demand for addiction treatment in the 1990s, the incidence of new cases of heroin addiction has fallen greatly, especially in teenagers (Smyth and McCarney, 2020, O'Neill et al., 2020). Cannabis is the main drug for over half (58%) of all new treatment entrants under the age of 25 years (Figure 7).

Figure 6.

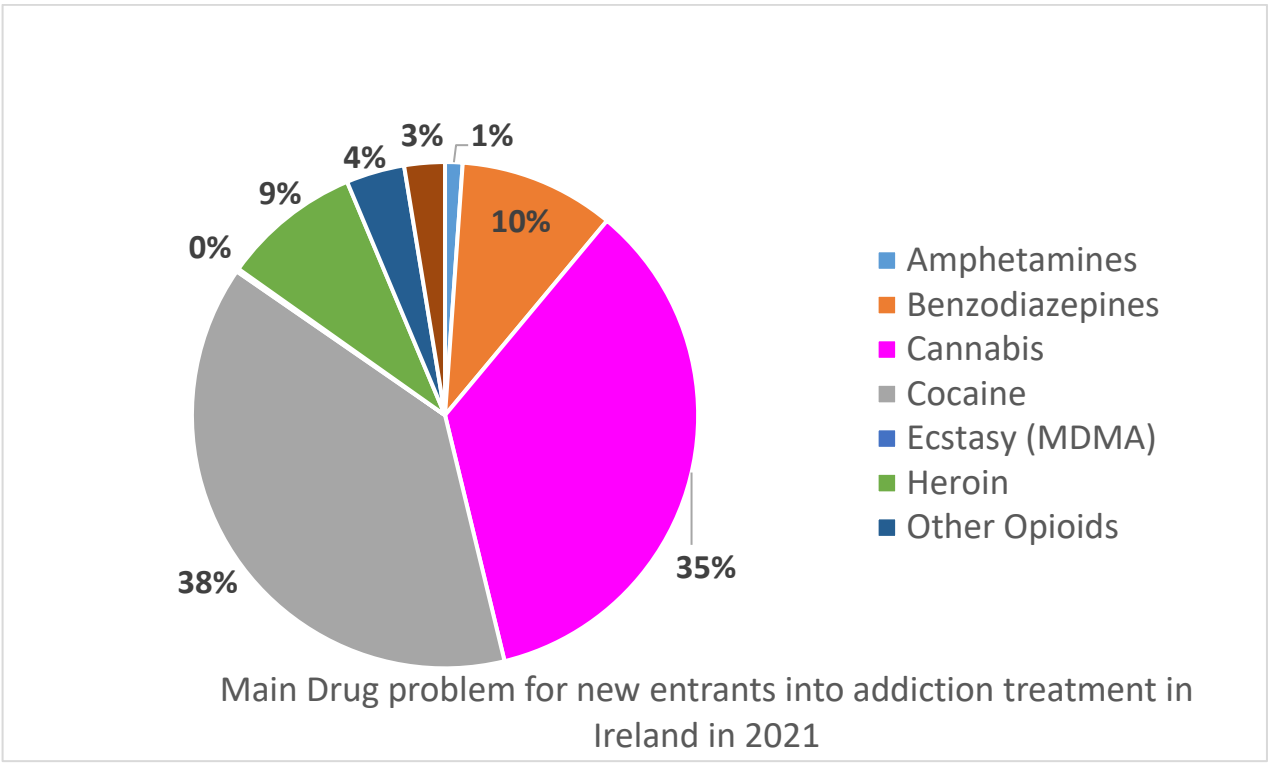
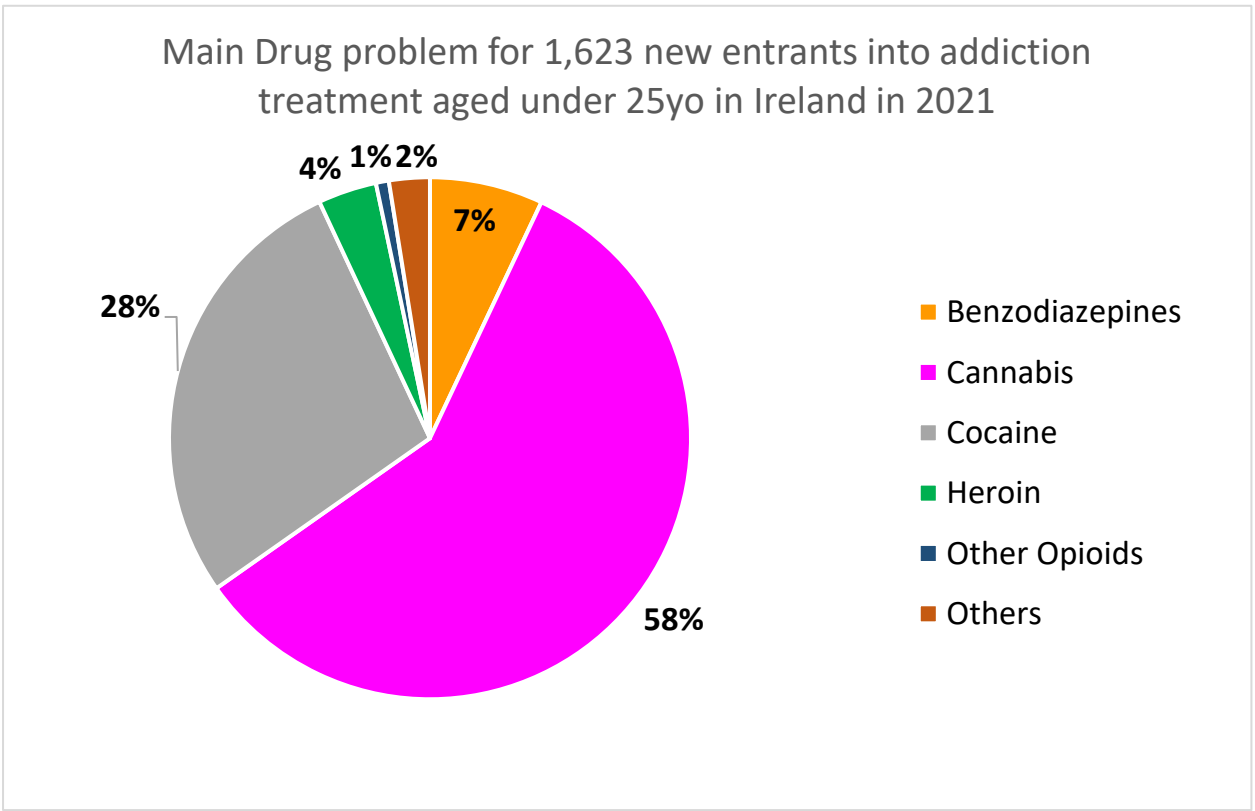


Figure 7.



Cannabis use

In Ireland, the latest prevalence estimates, from 2019/20, for the past year and the past month cannabis use are 5.9% and 2.9% respectively across the population aged 15 years and older (Mongan et al., 2021). This equates to 113,000 people using cannabis in the past month. This same survey reported that 1.2% of respondents (~45,000 people in the general population) reported symptoms consistent with a cannabis use disorder (CUD), this being most prevalent in young males (Millar et al., 2021, Mongan et al., 2021). Similar patterns are evident across Europe (Manthey et al., 2021, EMCDDA, 2022). Estimates indicate that only about 5% of people with CUD access addiction treatment in Ireland each year (Mongan et al., 2022a).

Cocaine use

Cocaine use disorder has certainly been increasing in Ireland in the past decade. Use and cocaine related problems dipped during the years of austerity.

Heroin use

It is also estimated that there are about 19,000 people with opioid use disorders, mainly heroin (Hay et al., 2017). Given that there are about 11,000 people in receipt of opioid substitution treatment (OST), this indicates that about 60% of people are in treatment. We do not have good estimates of the prevalence of other drug addictions.

The Treatment Model for Addiction in Ireland

There is good evidence that addiction treatment is both effective and cost effective (French et al., 2000). In other words, money spent on treatment more than pays for itself by delivering reductions in costs that arise from untreated and ongoing addiction.

Tiered Model

A tiered model of service delivery for addiction treatment has been proposed for both adolescents and adults (Children, 2005, Doyle and Committee, 2010). This model proposes that the type of service a person will access will be matched to their level of need.

Tier One constitutes generic services with minimal expertise in managing addiction across sectors, including the health sector. There are initiatives such as 'Making Every Contact Count' (MECC) across the entire health sector and SAOR delivery in emergency departments (Meade et al., 2023, O'Shea et al., 2017). These measures offer a type of screening, brief intervention and facilitate early referral into treatment.

Tier Two comprises generally community-based services, with input by a limited number of disciplines. Such services prioritise accessibility and can meet the needs of people with mild to moderate addiction issues generally in community settings.

Tier Three comprises multi-disciplinary teams, which operate on an outpatient basis and can manage more complex addictions. The Department of Health document from 2005 outlines the range of competencies which are meant to be present in a Tier Three adolescent addiction service. These include medical skills to manage detox regimes; psychiatric skills to assess and manage comorbid psychiatric disorders; outreach competencies to engage hard to reach teenagers; understanding of adolescent development; skills in delivery of evidence based one-to-one therapies; and also, expertise within the team in family/systemic therapy. While there has been some expansion in the area of if adolescent addiction treatment in Ireland in recent years, and every area now has some form of service, these teams almost never have the full range of competencies noted here. In reality, they generally operate as Tier Two type responses. Very few teams have medical or psychiatrist input. Family therapy input is often not available. Family therapy has a strong evidence base in the treatment of adolescent addiction (Carr, 2009, Baldwin et al., 2012).

Tier Three adult addiction treatment teams also require input from a multidisciplinary team. The specialist addiction treatment services in Dublin have been very focused on responding to the large population with opioid dependence. There has been a relative lack of development of psychosocial capacity in these teams. This means that psychosocial aspects to patient care plans obtain insufficient attention. Also, there is a limited service provision for people with other drug addictions, where the bulk of the treatment response should be psycho-social in nature. There is a need for more recovery centered care and a need for trauma-focussed care for those you have suffered early and ongoing adversities

Tier Four involves residential treatment services. These services vary in their focus. A few services are medically managed and can deal with more complex detox issues. Most residential services are led by professionals such as nurses, counsellors or therapists. Some of these are medically monitored with a visiting doctor who can support the service in completing non-complex detox regimes and, possibly, stabilization for patients on OST. Within Tier Four, there are also longer-term facilities, sometimes called 'secondary treatment'. They act as a bridging support to people who have completed an initial intensive residential treatment but who require ongoing wrap-around support from peers and staff. Such facilities are particularly important for people for whom the recovery environment in their home of origin is less supportive of recovery, perhaps due to extensive drug problems within the immediate family or neighbourhood. Active efforts could be undertaken to build a recovery movement and recovery communities in Ireland (Owens et al., 2023).

There are some deficiencies in service capacity within each of these components of Tier Four treatment. In particular, there are issues regarding sufficient access to stabilization services for people on OST who are currently facing poly-substance addiction issues. Currently, there is no availability of the type of 'secondary treatment' input noted above for people under 18. There are challenges in providing services for the homeless population and the traveller population as well as those requiring trauma-focussed care,

Treatment adherence challenges exist at every level of need and service delivery. In any one year, only a minority of people with a SUD will seek treatment. Among those who seek it, only a minority will make it as far as an assessment. International research indicates that, even with a network of comprehensive, responsive and accessible treatment services, only about 10% of people with a SUD will enter treatment in any given year (Babor et al., 2008). We seem to be falling short of that standard in Ireland, with, for example, about 5% of those with a CUD accessing treatment per annum (Mongan et al., 2022a). Beyond treatment entry, it can be challenging for people to persist with treatment programs. Early, unplanned and premature exit from treatment are associated with poorer outcomes. These are issues for both service users and treatment providers.

Dual Diagnosis

Dual diagnosis, or comorbidity, is a very frequent feature of addiction (Kamali et al., 2000). These patients face two significant health issues, both an addiction and a mental disorder (MacGabhann et al., 2010). Dual diagnosis is extremely common among those with more severe addictions. Frequently, there is a background of trauma in childhood which acts as a background risk factor which can contribute to both the addiction and mental disorder (Hughes et al., 2017a). People with dual diagnosis exhibit higher rates of premature death and homelessness.

An emerging issue, evident especially in adolescent services but also adult services, relate to people who have a comorbid diagnosis of autistic spectrum disorder (ASD). Internationally people with ASD are being recognised as a vulnerable group for development of a SUD, and treatment services must modify to best meet their needs. (SABAA, 2022) ADHD is another frequent comorbidity which poses challenges. These comorbidities highlight the value in addiction treatment teams including staff with skills in the areas of assessing and responding to developmental disorders.

A major challenge in treatment delivery to people with dual diagnosis relates to coordination of treatment between addiction and psychiatric services (MacGabhann et al., 2010). While there have been examples of close collaboration between addiction treatment providers and mental health services, this has been inconsistently delivered nationally. Recently, the HSE implemented and published a national clinical care programme, *Model of Care for People with Mental Disorder and Co-existing Substance Use Disorder (Dual Diagnosis) (May 2023).* This programme involved input from addiction, psychiatry, the College of Psychiatrists and service users. The model of care outlines the resources needed to deliver a good quality dual diagnosis response for both teenagers and adults. Pilot sites have been identified and funding approved for same. There will be a need to quickly move to roll out of these services nationally once the learning from the pilot sites has been collated in 2024.

Addiction and Homelessness

People experiencing homelessness demonstrate vastly higher rates of addiction and mental disorder. There is a complex reciprocal relationship between addiction and homelessness, each problem perpetuating and complicating the other. Drug use can become a strategy to cope with living on the street. The lives of those living in hostels are marked by trauma. Many prefer to sleep rough rather than stay in a hostel. This group face particularly high risks of premature drug related death (Lynn et al., 2023). Addressing the needs of this vulnerable group requires substantial co-ordination between homeless services, addiction services and mental health services. HIQA recently produced guidance on steps to further improve communication and coordination between where different sectors with a view to improving outcomes (Devin, 2023).

Acute Health Risks

Deaths

Drugs use can result in a poisoning or 'overdose' death. Data on drug poisoning deaths is gathered by the HRB in Ireland and reported via the National Drug Related Death Index (NDRDI) (HRB, 2019). The most recent year of data relates to 2017, but some of the more recent years are being updated in the coming months. Drug poisoning deaths are extracted from this database and reported to the EMCDDA. The number of such deaths in Ireland has remained elevated at 190-235 per annum across the period 2008-2017. In 2017, there were 33 poisoning deaths among people injecting drugs, representing a 39% decline in such deaths since 2008. Since 2017, there has been increased roll out of access to take home naloxone in an effort to reduce heroin and methadone related deaths. There are also plans to open a supervised injecting centre in Dublin, but planning issues have resulted in protracted delays in the opening of it. We hope that these obstacles can be resolved promptly. While it is hoped that this will deliver further reductions in injection related overdoses, the impact of such centres may be limited (Panagiotoglou, 2022). Also, it is noteworthy that only about 15% of poisoning deaths now relate to injecting in Ireland, so there is a need also to focus efforts on reducing the growing proportion of non-injection related poisoning deaths.

The broader NDRDI report also includes data on deaths linked to alcohol, in the database (HRB, 2019). Among all poisoning deaths in 2017, the individual substance involved in the largest number of deaths was alcohol, followed by methadone, diazepam and heroin. Among the top eight individual substances involved in these deaths, only two are illegal (heroin and cocaine), one is legal and regulated for 'recreational' adult use (alcohol) and five are authorised prescribed medicines (methadone, diazepam, alprazolam, pregabalin and zopiclone). In single substance overdose deaths, the substance causing the largest number of deaths in 2017 was alcohol (61, 16% of all overdose deaths).

The group of people who are most vulnerable to overdose death in Ireland are those who are heroin dependent. There was a severe epidemic of heroin addiction which hit Dublin in the 1990s and then spread outwards across Ireland to peak in elsewhere around 2008 (O'Neill et al., 2020, Bellerose et al., 2011, Smyth and O'Brien, 2004). Heroin addiction disproportionately affected those from the most marginalized communities (O'Kelly and O'Kelly, 2012, Butler, 2002). Fortunately, the incidence of new episodes of heroin addiction has declined greatly among youth (Smyth and McCarney, 2020). This decline in heroin addiction among youth is likely to be a large contributor to the observed 60% decline in overdose fatalities among people in Ireland aged under 25yo in the decade 2008-2017 (Doyle et al., 2022).

While many of those who were caught up in the epidemic of the 1990s have found recovery, and many have achieved stability of opioid substitution treatment (OST), there is a very sizable population who continue to struggle with very problematic opioid addiction. The latest estimate indicates that there are about 19,875 people with opioid dependence, 60% of whom reside in Dublin and three-quarters (73%) are aged over 35 years (Hanrahan et al., 2022). As this group has aged, so has the average age of deaths among the overdose deaths noted in Ireland (HRB, 2019). This large group of people will likely remain very vulnerable to overdose death in the coming decades. Their treatment needs are very substantial, polysubstance use being quite common among those in some treatment clinics, and there are increasing medical comorbidities with age (Cullen et al., 2009). Crack cocaine has emerged as a rapidly increasing and very concerning problem in this cohort of people in recent years. People experiencing homelessness are at high risk of drug related death (Lynn et al., 2023).

Emergency Medical Problems

Drug use can cause acute health problems which require urgent attendance at health services, typically presenting to emergency departments. In the ongoing Euro-DEN study (which includes two Irish sites), cannabis tops the list of drugs involved in drug related attendances at hospital emergency departments (ED) in Europe, closely followed by cocaine and heroin (Miró et al., 2023).

While acute health problems related to cocaine and heroin are well described and understood, it is somewhat surprising to see cannabis feature so prominently in this list. In cases where cannabis is the only drug involved, this study indicates a wide range of health issues. The most common presenting complaints were anxiety (28%), vomiting (24%), agitation (23%) and palpitations (14%) (Schmid et al., 2022).

Cannabis precipitated ED attendances required hospital admission in 14% of cases and ICU admission in 2% (Miró et al., 2023). In ED attendances where cocaine was the only drug involved, 20% were admitted and 3% needed ICU treatment. For heroin, the corresponding figures were 19% and 5% (Miró et al., 2023).

While there are no recent published data for Ireland on drug related ED attendance, the Mater Hospital is one of the Irish sites participating in the Euro-DEN survey. Unpublished feedback from that site indicates that the drugs involved in the largest number of attendances are benzodiazepines, cocaine and opiates.

ED presentations linked to use of GBL/GBH are a growing concern in both Ireland and across Europe (Miró et al., 2023, Tay et al., 2022, Santlal et al., 2022). Regular use of these drugs can lead to physical dependence. Withdrawal symptoms can be complex and severe.

Psychiatric symptoms are very prominent presenting issues in cannabis related ED attendances. Similar observations have been made in US (Crocker et al., 2021). The prominence of vomiting as an issue in EDs may relate in part to cannabinoid hyperemesis syndrome (CHS) (Chocron et al., 2019).

Figure 8.

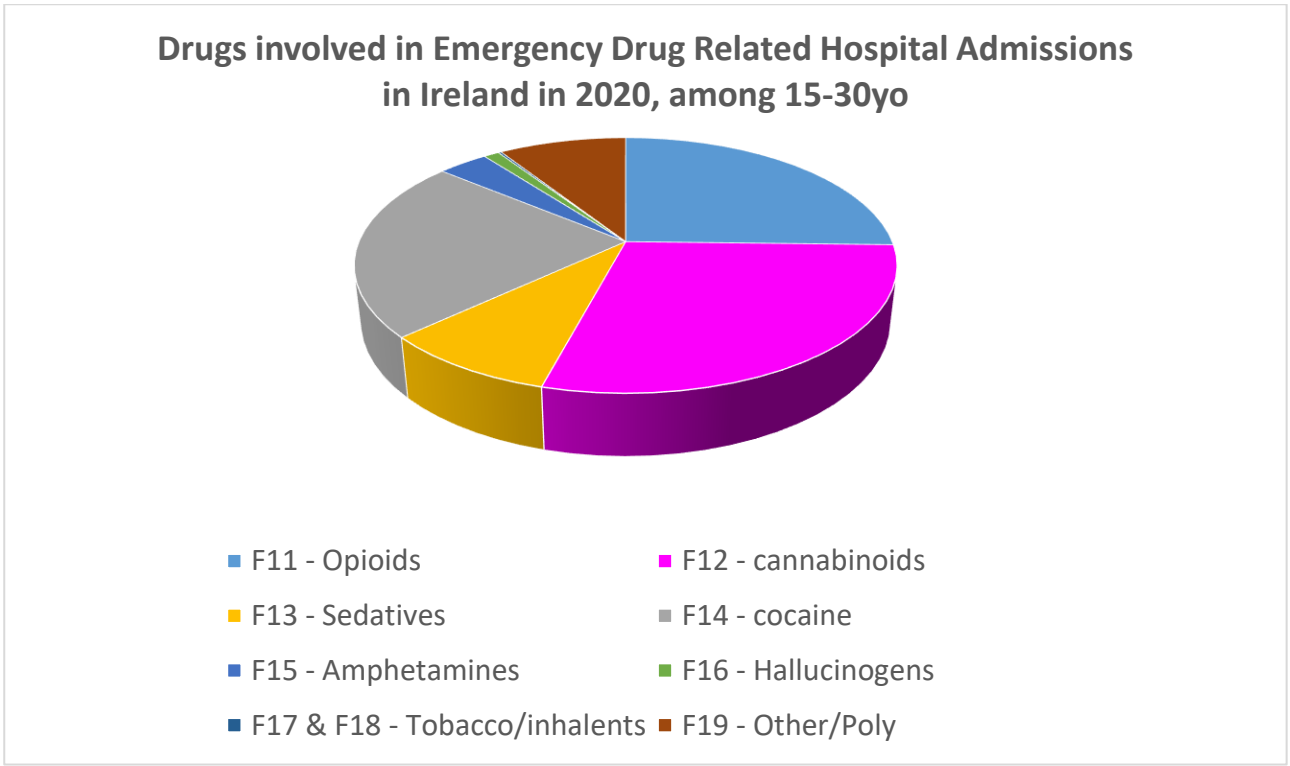
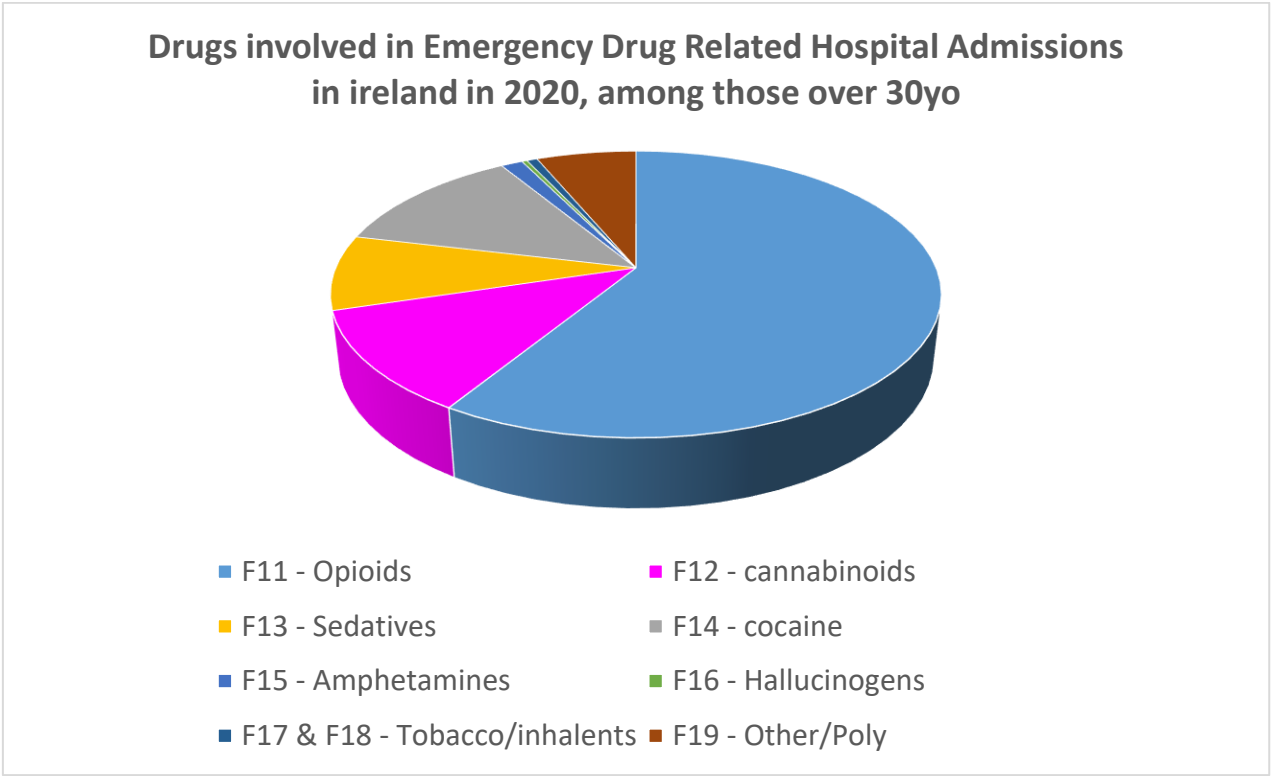


Figure 9.



For people actually admitted to hospital with a drug related diagnosis in Ireland, in 2020, the profile of drugs in these admissions differs by age group. Among people over 30 years, opioids account for the majority (59%). Among people under 30years, the main drugs involved are more diverse with cannabis (29%), opioids (25%) and cocaine (23%) being the most prominent.

In 2020, according to HIPE data, there were 926 emergency hospital admissions in Ireland related to cannabinoid use. This is the largest number of such admissions recorded to date in Ireland and constitutes a 340% increase on 2005 (Smyth et al., 2019b). While cocaine related admissions climbed during the Celtic Tiger years (2005-2007), they then fell during the period of austerity (2007-2011), but they have increased greatly in the past decade.

The arrival of synthetic cannabinoid receptor agonists (SCRA) has complicated the acute medical and psychiatric presentations. These substances first came to prominence in Ireland around 2009-2010 when a vast number of head shops opened. SCRA were sold legally in these shops as they were not specifically named in the Misuse of Drugs Act at that time. Other New Psychoactive Substances (NPS) such as mephedrone type drugs also came to prominence at that time also via these shops. In 2010, the use of NPS by young people in Ireland appeared to be higher than any other location in Europe, courtesy of the easy access which the network of head shops provided (Smyth, 2017). The sudden rise in use of NPS resulted in increased episodes of addiction and increases in both drug related medical and psychiatric presentations (Smyth et al., 2020, Smyth et al., 2019a, Smyth et al., 2017, Smyth, 2021). Fortunately, Government responded quickly, banning many of the NPS and then developing innovative legislation which made it illegal to sell psychoactive substances. These measures resulted in closure of the head shops. This then coincided with a decline in the NPS addiction, and a fall in the psychiatric and medical problems which they had been causing (Smyth et al., 2019a, Smyth et al., 2020, Smyth et al., 2015). Inevitably, some NPS migrated to the black market, but

problems related to NPS have remained low relative to those which existed at the time the head shops were open (Smyth, 2021).

SCRA are sometimes used knowingly. Black market dealers also occasionally use these substances in items sold as cannabis products. They have been detected in about a third of products sold as edible cannabis in Ireland. SCRA produce similar but more severe effects to cannabis (Winstock et al., 2015, Potts et al., 2020). While these products were widely used in smokable form in Ireland, when the head shops were open in 2010, there is limited evidence of any widespread use of smokable SCRA products in recent years (Smyth, 2021).

Chronic Harms

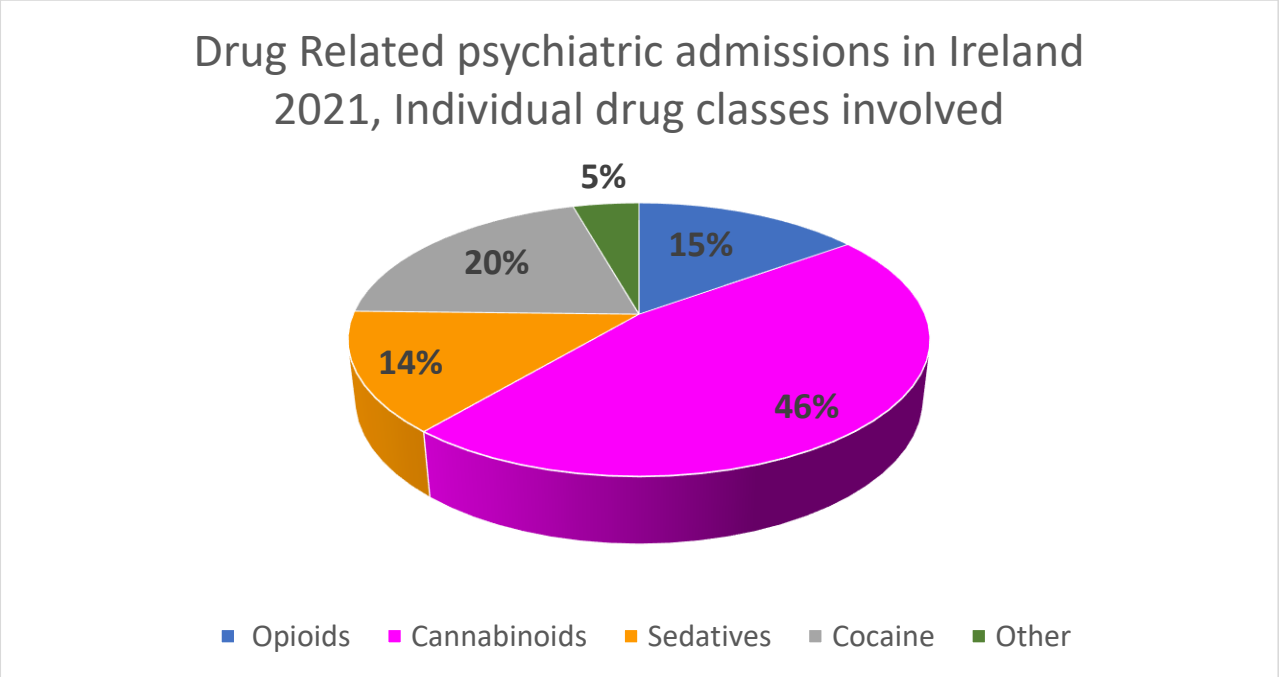
Mental Health

Among illegal drugs, cannabis is the most widely used. For this reason, it has been easier to research the mental health problems related to cannabis across the population. However, it is anticipated that the mental health issues identified as related to cannabis in epidemiological research are quite likely to also apply to other drugs.

There is increasing evidence that cannabis use during adolescence is associated with a small decline in IQ evident in later adulthood (Meier et al., 2012, Meier et al., 2022, Power et al., 2021). Many of the global leaders in psychosis research are now convinced that cannabis use is causally related to subsequent development of illnesses such as schizophrenia (Murray et al., 2016). In a recent, multi-centre case control, study in Europe, it was estimated that 12% of cases of first episode psychosis were attributable to high potency cannabis. This proportion was 30% in London and 50% in Amsterdam (Di Forti et al., 2019). A recent Danish study examining almost 7 million people estimated that 15% of cases of schizophrenia in males (and up to 30% in young males) could be attributed to CUD (Hjorthøj et al., 2023).

The majority of drug related psychiatric admissions in Ireland involve polysubstance use (Smyth et al., 2019a). Among young adults aged 18-34yo, one in every eight psychiatric admissions is drug related (Smyth et al., 2019a). In 2021, among the 479 admissions in which a specific drug class was noted, this was cannabinoids in 46% of cases (Figure 10). Cocaine was the second most common noted drug class (20%).

Figure 10



The National Self Harm registry has reported on the prevalence of drug problems among people presenting with deliberate overdoses. Cocaine and cannabis are the background drug problems noted most frequently (Joyce et al., 2020). Cocaine problems were evident in 19% of males aged 25-34yo and cannabis problems evident in 10% of males aged 15-24yo (Joyce et al., 2020). A systematic review has shown that cannabis use in youth is associated with a 3-fold increase risk of subsequent suicide attempts and suicidal thoughts in young adulthood (Gobbi et al., 2019, Han et al., 2021).

In Ireland, according to the NDRDI, cannabis is the most commonly involved drug (55%) in drug related non-poisoning traumatic deaths among people under 25 years old (Doyle et al., 2022).The next most commonly involved drugs are cocaine (37%), ecstasy (12%) and opioids (10%). Hanging was the most common method of death in these cases. In an Australian study, 25% of cannabis related deaths were by suicide (Zahra et al., 2020).

It is drug use during adolescence which carries the greatest concern from an addiction and mental health perspective. In the case of cannabis, this is possibly related to the important role which the endo-cannabinoid system plays in brain maturation changes during adolescence (Hall et al., 2020, Lubman et al., 2015). A number of prospective studies have found evidence of white matter changes in adolescents using cannabis (Hall et al., 2020, Owens et al., 2022, Albaugh et al., 2021). Worryingly, an EU funded study reported grey matter volume differences associated with extremely low levels of cannabis use in adolescence (Orr et al., 2019).

Medical Problems

People who inject drugs (PWID) are at greatly increased risk of blood borne viral infections, such HIV and Hepatitis C (HCV). As evidence of the success in responding to the needs of PWID in Ireland, there has been an 85% decline in incidence of HIV among PWID from 2000 to 2018, the decline being largest among those under 30. There has also been similar decline in incidence of HCV among PWID (HPSC, 2018).

Each individual drug tends to have a range of specific medical issues which it can cause. Cocaine use is associated with cardiac problems and strokes (Havakuk et al., 2017). Regular use of ketamine can cause bladder problems (Misra, 2018). Cannabis smoke contains many of the same toxins and carcinogens as tobacco smoke and respiratory physicians have advised against this activity (Association, 2022, Association, 2018, Agency, 2009). Cannabis also generates some cardiac concerns including risk of MI, atrial fibrillation and stroke (Patel et al., 2020, Page et al., 2020, Testai et al., 2022).

Harm to Others

Beyond the individual using drugs, there are potential adverse health impacts on those around them, an issue that is now referred to as harm-to-others (Boury et al., 2022). The issue of harm to others has become an increasingly important component of discussions on both alcohol and drug policy (Wilkinson and Ritter, 2021). Some individuals who use alcohol or drugs will argue that society should not be intervening in their autonomous decision to engage in substance use, saying that their decision to take risks with same affects nobody else. Similar arguments may be made by those from a libertarian perspective. The reality that harm can also arise for others, apart from the person engaging in substance use, provides a partial counter to such arguments.

Drug intoxication impairs driving ability and increases the risk of a road traffic collision. (Hall, 2015, Hasan et al., 2022) In Ireland, the drugs detected most frequently in cases of drug driving, in 2021, were cannabis (2689 cases), cocaine (1462 cases) and benzodiazepines (662 cases) (MBRS, 2022).

A second area of concern is violence, including intimate partner violence (IPV), where it is estimated that regular drug use is associated with a two to three-fold increased risk of IPV (Daldegan-Bueno et al., 2022, Dellazizzo et al., 2020, Smith et al., 2012, Kraanen et al., 2014). Cannabis and other drug use increases risk of violence in people with psychotic disorders (Dugré et al., 2017, Beaudoin et al., 2023, Kalk et al., 2022).

Parental drug use constitutes an adverse childhood experience (ACE). Increased ACEs in childhood are associated with a wide range of poor outcomes (Felitti et al., 1998, Hughes et al., 2017b). A recent review of

Irish data estimated that between 4-24% of all children in Ireland are affected by parental drug use (Galligan and Comiskey, 2019). There are ongoing efforts to ensure staff working in addiction services can assess and supportively respond to the needs of children of adult patients via the *Hidden Harm* initiative. Innovative interventions have been rolled out in some services in Ireland to support parents with addiction, such as the *Parents Under Pressure* program (Barlow et al., 2019).

Beyond the impact on children, there are also adverse impacts on other family members (Copello et al., 2010). As psychiatrists, we frequently meet patients who are distressed by the impact which addiction is causing for their loved one and the problems that addiction brings into family homes (Orford et al., 2013).

There are likely to be issues with second-hand smoke from drugs such as cannabis, given the pulmonary risks noted earlier (Association, 2022, McKee et al., 2018).

Finally, if drugs are used during pregnancy there are risks (Steele et al., 2020). Among the illegal drugs, cannabis is the most widely studied as it is the most commonly used. Cannabis use during pregnancy is associated with low birth weight and pre-term delivery (Bandoli et al., 2023, Marchand et al., 2022). There is growing evidence of enduring neuro-psychological impacts in children exposed to cannabis in-utero (Baranger et al., 2022, Paul et al., 2021).

Legislative Options to Reduce Harms?

Public health, a health led approach and the Criminal Justice System

Doctors strongly support *a health led approach* to cannabis and wider drug policy. Criminal justice and health are not opponents. Laws and sanctions are utilised across many areas of public health to nudge the behaviour of citizens away from risky behaviours and towards healthier actions. The Criminal Justice System often plays a role in achievement of positive outcomes in areas of public health, including our successful efforts to curtail mortality and injury related to road traffic collisions and, most recently, during the Covid-19 pandemic. The issue of proportionality of the criminal justice response must always be kept under review (A et al., 2021, Weatherburn et al., 2003, Health, 2019).

As part of Ireland's health led approach to the problem of drug use, our national strategy *Reducing Harm, Supporting Recover* is in operation (Health, 2017). In relation to action 3.1.35 to 'Consider the approaches taken in other jurisdictions to the possession of small quantities of drugs for personal use with a view to making recommendations on policy options to the relevant Minister within 12 months', a Working Group was convened and produced a report on this issue (Health, 2019). The Working Group comprised representatives from the Departments of Health and Justice, an Garda Síochana, the HSE, the Probation Service, the HRB, the DPP, people with lived experience of using drugs and legal expertise. The group considered the options available within the Irish legal Framework including decriminalisation, legalisation and health diversion. An extensive consultation process was undertaken both with the general public and with people who had lived experience of drug use. The Working Group recommended a *Health Diversion* approach whereby individuals caught in possession of drugs for personal use would be referred to the HSE for a brief intervention, and treatment if required, instead of progressing into the Criminal Justice System (Health, 2019). In other words, an individual would not receive a conviction but rather a referral to the Health Service.

This recommendation was made in 2019 but has still not been implemented. There is a need for the Government to address any barriers preventing the progress of this approach and to set up the *Health Diversion Programme* as a matter of urgency. Once this is in place, we can then evaluate the benefits or otherwise of such an approach.

Evidence from international research shows that young people factor the risks of criminal justice consequences into their decisions regarding drug use (Weatherburn et al., 2003, Benedetti et al., 2021, Hathaway et al., 2016). In a recent study of Irish third level students, almost half of those who reported abstinence cited such concerns as one of the many reasons behind their personal decision not to use drugs (Byrne et al., 2022a). In another Irish study of youth aged 16 to 24 years, 452 people provided reasons for their decision not to use cannabis when they had a recent opportunity to do so. "Fear of legal consequences" (19%) was one of the most commonly cited reasons for opting not to use. A recent US study of students found that half would be more inclined to use cannabis if legal (Bolts et al., 2023). While the deterrence effect of drug laws may not be very large, we recognise as doctors that small effects across large populations can be clinically important.

Cannabis legalisation – regulating sale of cannabis

There has been increased discussion about legalising drugs which are currently illegal. To date most of this conversation has focused on cannabis. In theory, regulated sale could allow consumers to source a product of consistent quality and known potency.

We know that our two current legal addictive drugs in Ireland, alcohol & tobacco, cause devastating levels of harm, and wider health inequalities (Murray et al., 2020, Smith and Foster, 2014, Adler et al., 2016). As noted earlier, the latest Irish data on alcohol and drug poisoning deaths from the NDRDI reminds us that legal and regulated does not mean safe and harm-free. Indeed, alcohol is the individual substance which is involved in the largest number

poisoning deaths (HRB, 2019). Beyond overdose deaths, alcohol is responsible for many more deaths each year than all illegal drugs combined (Mongan, 2016).

The legal status of both alcohol and tobacco has facilitated a great deal of intrusion by corporations into public policy, and this influence works in opposition to public health (Kickbusch et al., 2016). It would be naive to believe that a cannabis industry would behave any differently, given that both alcohol and tobacco corporations now invest heavily in the new Canadian cannabis corporations (Connor et al., 2021).

Against the background of incremental liberalisation of cannabis policy in North America, morbidity related to CUD has reached extremely high levels there by global standards. According to a Global Burden of Disease examination of CUD, Canada and US are performing worst in the world in this regard (Shao et al., 2023). For this reason, the precautionary principle suggests that other countries should be very wary of proceeding down the same policy path as US or Canada (Colizzi and Murray, 2018).

Legalisation in Canada came with the promise of keeping cannabis out of the hands of children, improving public health and displacing the black market (Boury et al., 2022). Assessed by its own ambitions, it seems to have broadly failed to deliver on these. Cannabis use among youth remains at the same extremely high levels by global standards (Smyth and Cannon, 2021). There is some evidence of increase in adolescent CUD in US following legalization (Cerdá et al., 2020). The prevalence of daily cannabis use by 16-year-olds in the US increased six-fold from 1991 to 2019, while remaining relatively static in Europe across this timeframe (Johnston et al., 2021, Group, 2020). In Canada, the prevalence of daily cannabis use among 16- to 19-year-olds was stable but alarmingly high at 9% in 2020 (Health Canada, 2020) (Canada, 2020).

In spite of the challenges of conducting evaluations of legalisation impacts, there is already evidence pointing to increases in rates of intensive and harmful use in legal locations (Imtiaz et al., 2023, Hasin, 2023, Kilmer et al., 2022). The US Household Survey indicates that prevalence of daily use by adults increased 10-fold from 1992 to 2021. Daily use by adults in Canada increased six-fold across the period of cannabis policy liberalization and ultimate legalization, from 2000 to 2019 (Imtiaz et al., 2023). There was a significant acceleration in daily and harmful use patterns following the announcement of government plans to legalize in Canada, and this increased further following actual legalization (Imtiaz et al., 2023).

Cannabis commercialisation has been associated with increases in cannabis related emergency department attendances (Myran et al., 2022b, Myran et al., 2022a, Wolf et al., 2020, Myran et al., 2022c). A study of Cannabinoid Hyperemesis Syndrome cases in EDs in Canada noted a 13-fold increase in presentations across the period from 2014 to 2021 (Myran et al., 2022b). ED presentations for cannabis-induced psychosis doubled between 2015 and 2019 (Callaghan et al., 2022). A study in Colorado found that the rate of attendance at ED with psychosis increased in tandem with increasing numbers of 'recreational' cannabis dispensaries (Wang et al., 2022). Research from Canada & Colorado suggests that cannabis impaired drivers appear to be involved in increasing numbers of crashes, injuries and fatalities (Lane and Hall, 2019, HIDTA, 2019, Brubacher et al., 2022).

There has been a consistent pattern of increases in paediatric presentations to emergency departments in locations which have legalised cannabis, attributable to cannabis edibles in most cases (Callaghan et al., 2023, Ryan, 2021, Yeung et al., 2021, Myran et al., 2022c, Roth et al., 2022).

The concern and caution expressed by doctors has been drowned out by sophisticated and very well-funded legalisation campaigns. The Canadian cannabis corporations now attract major funding from the other addiction industries, big alcohol and big tobacco (Connor et al., 2021). They are now active in lobbying and advocating for cannabis legalisation in Ireland and across Europe.

A surprising feature of legalisation to date has been the robust nature of the black market. It continues to thrive in legal locations, where it retains 40-70% of the overall market (HIDTA, 2019, Armstrong, 2021). Given that

legalisation has driven up use, this suggests that it poses little threat to the turn-over of organised crime groups. Competition between the legal & illegal producers has driven potency up and costs downward (Tassone et al., 2023, Hall and Lynskey, 2020). Cheaper and stronger products are bad from a public health perspective. The black market will always be able to sell cheaper than a regulated vendor. The youngest, poorest and most dependent cannabis users can be expected to gravitate towards this illegal market, as they are the most price sensitive (Wadsworth et al., 2022, Hawke and Henderson, 2021).

Looked at broadly, there is a substantial reason to be concerned that legalisation has a range of adverse health impacts based upon this experience in North America. There is no real evidence of any health benefits. This explains why the American Medical Association (2020) believes that cannabis should not be legalised (AMA, 2020). The World Medical Association, the American Academy of Pediatrics and a number of State Medical Societies have also voiced their opposition to cannabis legalisation (Pediatrics and Abuse, 2015, MSSNY, 2020, WMA, 2017). Similarly, for the reasons as outlined above, the College of Psychiatrists of Ireland would be very concerned that any move to legalise and commercialise cannabis would increase use and harms to public health.

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