

A REPORT FOR ANA LIFFEY DRUG PROJECT

# Doing More The Health and Social Impacts of Crack Cocaine Use in Limerick City

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**FUNDED BY:**

Health Service Executive

Mid-West Community Healthcare Organisation (CHO3)





# Acknowledgements

This research would not have been possible without the contributions of numerous people. Our sincere gratitude goes to all study participants who shared their experiences and knowledge with us.

Our sincere gratitude also goes to the Ana Liffey Drug Project's Midwest Team and the HSE Limerick Drug and Alcohol Service for their immense support throughout this project especially with the recruitment of study participants. In this regard, we would particularly like to thank Rachel O'Donoghue, Pat Galligan and Helen Ryan.

A special thanks also goes out to the local steering group of stakeholders for their guidance and support throughout this research:

- Tony Duffin (Ana Liffey Drug Project)
- Helen Ryan (Mid-West Regional Drugs & Alcohol Forum)
- Dr Patrick O'Donnell (HSE)
- Rachel O'Donoghue (Ana Liffey Drug Project)
- Dr Colin O'Driscoll (HSE)
- Andy O'Hara (UISCE)

We would also like to thank the Health Services Executive Mid-West Community Healthcare Organisation (CHO3) for providing the financial resources required for this research. In this regard, we would particularly like to thank Rory Keane.



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# CHAPTER ONE



# 1.0

## INTRODUCTION

This section of the report will provide a profile of Limerick City, the background of the research, policy context and the research aim and objectives.

### 1.1 Profile of Limerick City

Limerick city is in the Mid-Western Region of Ireland which covers counties Limerick, Clare and North Tipperary. The region is relatively rural and Limerick accounts for over one quarter of the region's population which is approximately 240,00 people. The high deprivation in Limerick city can be found across indicators such as education, social class, unemployment rates, housing, lone parents, inter-family relationships, deliberate self-harm and homelessness (Howley, 2009). Illicit drug use has been identified as a major problem in the Mid-West Region which comprises of counties Limerick, Clare and North Tipperary. As a result, the Mid-West Regional Drugs & Alcohol Forum was established in 2003 under the 2001-2008 National Drug Strategy to oversee responses to the drug problem in the region. According to the 2011 statistics from the Central Statistics Office, the population of this region has increased by 5% since 2006 with county Limerick experiencing the highest increase of 8.4% (Central Statistics Office, 2011).

### 1.2 Policy Context

Laws on drug control in Ireland began when the country was still part of the United Kingdom. The first significant legislation on drug control in Ireland was the Dangerous Drug Act of 1934. It was not until 1991 that drug legislation was in the outline of a National Drug Strategy (National Coordinating Committee on Drug Abuse, 1991). The Misuse of Drugs Acts 1977 is the main policy which outline criminal offences related to illicit drug use (European Monitoring Centre for Drugs and Drug Addiction, 2013). Since then, diverse national drug strategies have been established based on internal and external influences. The latest national drug strategy being 'Reducing Harm Supporting Recovery: A health-led response to drug and alcohol use in Ireland 2017-2025' - which was published on 17th July 2017. Also, attempts to deal with illicit drug use and its consequences are evident in a wide range of national policies and initiatives such as the Mental Health Strategy, the National Sexual Health Strategy 2015-2020, the Homeless Strategy National Implementation plan, the Irish National Strategy to Reduce Suicide 2015-2020 and An Garda Síochána's 2016 National, Regional and Divisional Policing plans (Department of Health, 2017).

One significant development with regards to the policy development process was the in-

roduction of harm reduction strategies and the increasing acknowledgment of the association between illicit drug use and social disadvantage (Butler, 1997). The acknowledgement of this link led to development of 12 local Drugs Task Forces in specified areas experiencing high incidence of illicit drug use accompanied with a range of socioeconomic issues. After this, Regional Drug and Alcohol Task Forces were established for areas facing related problems (O'Reilly & Cionnaith, 2019). The Mid-West Regional Drugs and Alcohol Forum is the main statutory body that oversees responses to the drug problem in Limerick City and County. This forum is one of the ten regional task forces that was established based on the recommendation of the National Drug Strategy 2001 – 2008. The forum is comprised of community, voluntary and statutory representation. The role of the task forum is to formulate and supervise the execution of action plans which coordinate significant drug projects in the region and deal with disparities in the delivery of services (Howley, 2009). It also identifies gaps in drug and alcohol problems in the mid-west and reviews emerging trends.

Ireland's current policy on illicit drug use, "Reducing Harm Supporting Recovery", is the first approach which focuses on a unified public health approach to illicit drug and alcohol use rather than a criminal justice approach. Action plans that have recognized current and evolving disparities were used in implementing the strategy. These action plans are in supply reduction, prevention, treatment, rehabilitation and research (Department of Health, 2017). Under the mid-term review of "Reducing Harm Supporting Recovery" there are six strategic priorities to be implemented for the period 2021-2025 (Department of Health, 2021).

**The six priorities are:**

1. Strengthen the prevention of drug and alcohol use and the associated harms among children and young people.
2. Enhance access to and delivery of drug and alcohol services in the community.
3. Develop integrated care pathways, to achieve better health outcomes, for people who engage in high-risk drug use.
4. Address the social determinants and consequences of drug use in disadvantaged communities.
5. Promote alternatives to coercive sanctions for drug-related offences.
6. Strengthen evidence-informed and outcomes-focused practice, services, policies and strategy implementation.

### **1.3 Research background**

Cocaine hydroxide is a drug which originated from the leaves of the coca bush and is cultivated mainly in Columbia, Peru and Bolivia. In Ireland, the drug is available in a powder form (hydrochloride salt) and in a solid form popularly known as crack cocaine. Crack cocaine is a stimulant drug that is made by washing the salt with ammonia or mixing it with sodium bicarbonate (National Advisory Committee on Drugs, 2003). Local anecdotal reports indicates that Limerick has a developing crack cocaine problem (O'Rourke, 2022; Raleigh, 2021). Also, according to the National Drug Reporting System, in 2021 cocaine was recorded as the

second most popular additional drug with an increase from 32.5% in 2015 to 53.9% in 2021 (Lynch et al., 2022). The latest figures from the Health Research Board show continued growth in the number of cases seeking treatment for problem cocaine use with cocaine overtaking heroin as the main problem drug with 3,248 cases while heroin recorded 3,168 cases (Kelleher et al., 2022). Similarly, in 2019 cocaine was recorded as the second highest treated drug in Limerick. Data from the national drug reporting system show that cocaine treatment increased significantly in Limerick between 2018-2020 from 0 cases in 2004 to 131, 141 and 120 cases respectively for the years 2018, 2019 and 2020 (Health Research Board, 2020). Literature has shown that substance use treatment is predominantly oriented towards the needs of opioid users and has called for the development and delivery of more cocaine specific services. Despite the increase in levels of use and treatment seeking for crack cocaine use, there is limited national and international research available on the profile of people who use crack cocaine, their needs, and effective responses. As a result, there is the need to undertake research that seeks to understand crack cocaine use and users in Limerick and how the needs of people who use crack cocaine can be met.

## 1.4 Research aim

The primary aim of this study is to explore the health and social impacts of crack cocaine use in Limerick City.

### Research Objectives

- To report on the lived experience of people who use the drug in Limerick City area.
- To report on the health and social impacts of crack cocaine use.
- To consider what impact the COVID-19 pandemic has had on the use of crack cocaine in the Limerick City area.
- To report on the current service responses in the Limerick City area addressing the use of crack cocaine.
- To make recommendations, in line with good practice, to ensure that the needs of people who use crack cocaine are met.



# CHAPTER TWO



## 2.0

# LITERATURE REVIEW

This section of the report will explore a review of literature on the prevalence of crack cocaine use, its impacts and interventions for people who use crack cocaine.

### 2.1 Prevalence of crack cocaine use in Ireland

In the European Region, Ireland is among the countries with the highest incidence of cocaine use (European Monitoring Centre for Drugs and Drug Addiction, 2018). According to a study, between 2006-2007, a low percentage of people aged 15-64 years reported using crack cocaine at some point in their life (NACD & DAIRU, 2006). However, as indicated by the national drug treatment data (Health Research Board, 2018) and the national prevalence data (NACD & PHIRB, 2011) there has been an increase in both powder and crack cocaine use. In 2016, cocaine was the third most common substance used (12.3%). Additionally, 11.3% of people in treatment reported crack cocaine as their primary challenge. This figure indicates an increase compared to 9.1% which was reported in 2010 (Health Research Board, 2018). Between 2013 to 2019, the sum of cocaine cases in treatment increased from 7.9% to 24.0 (Health Research Board, 2020).

Also, according to the most recent National Drug and Alcohol Survey for 2019/2020, cocaine is the third most common substance (1.9%) with its use rising across all age groups. The current use of cocaine among 25-34-year-old males has risen from 1.8% in 2002/2003 to 9.4% in 2019/2020 (Millar et al., 2021). Not only is it the second primary problem drug (24%), but overall, an increasing trend has been observed with regards to prevalence, treatment and death. Between 2016 to 2017, a 26% increase was observed in cocaine related deaths. Also, a sum of 400 deaths caused by cocaine use were recorded between 2008-2017 (Health Research Board, 2019). More info here

In north Dublin, one in 200 adults admitted to using crack cocaine at some stage in their life's. Also, nearly 1% of people living in the south-east coast of Dublin and Wicklow had ever tried crack cocaine. The findings of a study which examined the nature, extent and experience of alcohol and drug use among people who were homeless in four cities in Ireland concluded that, out of 355 respondents, 3% used crack cocaine a month before the study while 19% had used crack cocaine at some stage in their life (Lawless & Corr, 2005).

The lifetime use of crack cocaine is higher among men (0.8%) and adolescents (1.5%). Similarly, crack cocaine use is higher among men (11%) compared to women (5%) (European Monitoring Centre for Drugs and Drug Addiction, 2018). However, compared to men, women who use

substances have a higher tendency to be reliant on crack cocaine than other substances (Lejuez et al., 2007). A rise in cocaine use among females has been observed with a rise from 0.5% in 2014/2015 to 1.1% in 2019/2020 (Millar et al., 2021). The distinct reactions to crack cocaine by females is because of a female hormone oestradiol which stimulates a specific receptor (National Institute on Drug Abuse, 2017). Three groups of women have been identified to use crack cocaine. These are women who are sober, those who tried to manage their consumption and women who are severe or daily users (Diulaityte et al., 2007). Also, crack cocaine use is more prevalent among marginalised and socially underprivileged people such as those who are homeless and sex workers (European Monitoring Centre for Drugs and Drug Addiction, 2007).

## 2.2 Health implications of crack cocaine use

### Physical health

According to various scientific writings, the use of cocaine is the known cause of cerebrovascular diseases which is the cause of 40.3% of visits to the emergency room (Substance Abuse and Mental Health Services Administration, 2014). Majority of these visits involve men between the ages of 35-44 years. Damages to the cardiovascular and cerebrovascular systems caused by cocaine use has been associated with hypertension, tachycardia, ventricular arrhythmias (Afonso et al., 2007) myocardial infarction (Darke et al., 2006) and stroke (Ren et al., 2012).

The association between stroke and cocaine use is impacted by demographics, way of life, patterns of cocaine use, poly drug use (European Monitoring Centre for Drugs and Drug Addiction, 2007; Nakamura et al., 2012) and other health conditions such as diabetes mellitus, hypertension, cerebral vascular malformations (National Institute of Neurological Disorders and Stroke-National Institutes of Health, 2012). Due to the high death and disability rates associated with strokes, it is of interest to public health (National Institute of Neurological Disorders and Stroke-National Institutes of Health, 2012). The use of cocaine raises blood pressure, heart rate (Knuepfer et al., 2005) and leads to diffuse vasoconstriction (Iliff et al., 2008) with dose-related cerebral vasoconstriction evidenced on magnetic resonance angiograms (Kaufman et al., 1998).

The use of crack cocaine has also been associated with increased cases of tuberculosis including drug-resistant tuberculosis (Young et al., 2014). However, in comparison to other populations that use drugs, no relationship has been found between tuberculosis, crack cocaine use and the consistent sharing of crack pipes (Bouscaillou et al., 2016). Among vulnerable populations, a relationship has been observed between crack cocaine use and advancement from HIV to AIDS (Baum et al., 2010) as well as developing AIDS defining diseases such as herpes zoster, pneumonia, tuberculosis and STIs (Pinto, 2014).

For instance, in a study among young adults, the prevalence of STIs (Khan et al., 2013) and the occurrence of pelvic inflammatory disease (Jossens et al., 1996) was associated with crack cocaine. However, in populations that use drugs, continuous correlations were not observed with regards to crack cocaine and general or particular STIs (Berbesi Fernández et al., 2016).



A positive correlation has also been discovered between the use of crack cocaine and bronchitis, pneumonia, injection site infection, invasive pneumococcal disease and methicillin-resistant staphylococcus aureus infection (Vayalumkal et al., 2012).

Polysubstance use disorder is prevalent among people who engage in recreational drug use, including cocaine users, and ethanol is frequently combined with cocaine (Liu et al., 2018). Cocaine is a stimulant that can produce feelings of euphoria, but as it wears off anxiety may arise; alcohol is sometimes used with cocaine to enhance the effects of cocaine, prolong the cocaine high, or to soften the sometimes abrupt “bumps” in cocaine use (Midanik et al., 2007). When cocaine and ethanol are used together, a psychoactive metabolite is produced with similar pharmacological and psychoactive properties as cocaine (Andrews, 1997). This metabolite, cocaethylene, is considered more toxic to the cardiovascular and hepatic systems. Cocaethylene increases heart rate and blood pressure (Armitage et al., 2010).

### **Mental Health**

Many studies have proved the association between the use of crack cocaine and serious psychiatric indicators and psychosocial disturbances (Kessler et al., 2012). The most popular mental health conditions that have been associated with crack cocaine use are antisocial personality disorder (ASPD), depression, post-traumatic stress disorder (PTSD) and suicide (Kessler et al., 2012). According to a study, compared to people who have no history of crack cocaine use, people who have previously used crack cocaine were eight times more likely suffer from post-traumatic stress disorder (PTSD) (Narvaez et al., 2014). The association between these two variables can take two different routes. Firstly, PTSD may pave the way for substance use. This may be an effort to minimize the adverse effects of PTSD through self-medication (Narvaez et al., 2014). Secondly, the use of substances leads to an increased likelihood of exposure to traumatic conditions which could be a potential start of symptoms of PTSD (Inciardi, 2002).

A study by Kessler et al (2012) concluded that, crack cocaine use was negatively correlated with suicide ideation. As a result, it has been recommended that, the use of crack can be used to forecast suicide attempts (Kelly et al., 2002). According to a study, cocaine use alone cannot be used as a determinant of poor mental health (Haasen et al., 2005). However, factors such as severity of use, physical health and a person's social circumstances can be used as predictors. Diverse studies have concluded that, severity of crack cocaine use is associated with severe outcomes. Users of crack cocaine have a higher tendency to show indications of poor mental health and greater levels of anxiety, depression, ideation of suspicion and psychoticism (Gossop et al., 2000; Gossop et al., 2002). Positive associations have also been discovered between crack cocaine use and attention deficit hyperactivity disorder (ADHD) (Narvaez et al., 2014).

### **Socio-economic impacts**

Crack cocaine use has been linked to vices such as drug dealing (Carvalho & Seibel, 2009), prostitution (Rash et al., 2016) and acquisitive crimes (Connolly et al., 2008). The reason for

these crimes is to fund their crack cocaine use. Crack cocaine use has also been linked to huge financial costs due to its addictive nature (Harocopos et al., 2003). Due to the huge financial burden associated with crack use, crack users frequently acquire debts. These debts if left unpaid leads to intimidation of themselves and their families (Connolly & Buckley, 2016). In some situations, even if debts are paid the intimidation and extortion can continue. Family members of people who use crack cocaine also experience other impacts. These include fear for the family, relationship breakdown, concern for the health and safety of the person using crack cocaine as well as personal anxiety and depression (Orford & model., 2010). Additionally, it has been noted by people who use crack cocaine that their crack cocaine use has taken precedence over their family responsibilities (Melhuish, 2011). This has ensued in the neglect of family responsibilities such as parenting (Tunnard, 2002).

## 2.3 Interventions for crack cocaine use

The profile of people who use crack cocaine is a key consideration for service providers. Crack cocaine use has become more widespread among marginalised and socially disadvantaged groups such as people experiencing homelessness, and people involved in sex work. Because people who use crack cocaine have a more marginalised social profile compared to powdered cocaine users, they tend to cause specific challenges to services (European Monitoring Centre for Drugs and Drug Addiction, 2007). This reiterates the importance of considering the challenges these categories of people present with regards to provision of services.

A review of literature on treatment interventions for illicit crack cocaine use showed three main types of interventions These are psycho-social (e.g., cognitive behavioural and/or contingency management), ancillary/adjunct treatment (e.g., acupuncture, EEG biofeedback) and pharmacotherapy (Fischer et al., 2015). Also, immunotherapy and harm reduction interventions are other treatment options that are common when it comes to treatment for crack cocaine use (Pirone & Hedrich, 2009).

Although the efficacy of pharmacotherapies such as disulfiram (Pettinati et al., 2008) and central nervous system stimulant replacement treatment (Castells et al., 2007) are under-going research and require additional evaluation, they have been identified as a response to crack cocaine addiction (European Monitoring Centre for Drugs and Drug Addiction, 2018) Additionally, research is still in progress on the efficacy of immunotherapy which involves the administration of a cocaine vaccine which generates cocaine anti bodies. The use of immunotherapy has proven to diminish cocaine use and treatment retention (Martell et al., 2005)

A well-designed body of studies indicates that psycho-social treatment options can to an extent diminish illicit drug use, its adverse health impacts and improve social indicators for crack use. Even though studies are inadequate when it comes to treatment retention and are mainly focused on short-term outcomes, there happens to be a trend for personalized and more rigorous interventions to result in greater effectiveness. This reflects the findings of numerous systematic reviews whose focus was psycho-social treatment measures for

stimulant use (Dutra et al., 2008)

One major contribution to the efficacy of psycho-social interventions may be linked to the meaningful use and incorporation of contingency management in treatment strategies. However, one thing that must be considered is the fact that these populations may vary with regards to their drug use, socio-economic status and co-morbidity profile. Additionally, imminent studies need to concentrate on designing psychosocial interventions that are efficient for diverse high-risk and needs population of crack users with the aim of increasing treatment uptake and retention. High reversion and attrition rates are some of the challenges associated with interventions for crack cocaine addiction (Dutra et al., 2008). These challenges have been linked to lack of efficient long term pharmacological intervention (Robin & Jordan, 2007).

Treatment practitioners in Europe have identified some concerns with regards to the provision of services for people with crack cocaine addiction. These include cocaine related training opportunities for practitioners, enhanced collaboration between drug services and mental health services, stronger partnership with emergency services and the development of crack cocaine focused harm reduction services (European Monitoring Centre for Drugs and Drug Addiction, 2018). Concentrating on skills for practitioners has been highlighted as crucial for the efficient interventions for people who use crack cocaine (Robin & Jordan, 2007).

The literature shows that crack cocaine use is on the increase in Ireland. It also outlines the adverse effects it has on its users as well as interventions available for people who use crack cocaine and the challenges encountered with regards the delivery of these interventions.

A collection of white, irregular geometric shapes, including rectangles, chevrons, and zig-zags, scattered across the top half of the orange background.

# CHAPTER THREE



## 3.0

# METHODOLOGY

This chapter gives a detailed account of the research design which outlines the recruitment process, participant recruitment and data collection, data analysis and ethical reflections that drove the study.

### 3.1 Ethical approval

Before the commencement of the research, ethical approval was obtained from the University of Limerick hospital group ethics committee. Some ethical issues of specific interest when it comes to qualitative research of this type is the issue of informed consent, confidentiality, vulnerability, and privacy. To safeguard that consent was informed, verbal consent was obtained from all participants at the time of recruitment. Additionally, participants were asked to give their written consent before the interviews and focus groups. Confidentiality and the degree at which confidentiality can be guaranteed to participants is one factor that has made research with regards to illicit drug use more challenging (Fitzgerald & Hamilton, 1996). For this research issues of confidentiality were addressed by informing research participants of the scope of their confidentiality. Additionally, interview recordings were transcribed, and any names were removed from the transcribed files. As a result, results will be anonymous.

### 3.2 Research design

A qualitative, community based participatory research design was used to achieve study aims and objectives. This involved a mutual, reflective and systematic inquiry in which researchers and community stakeholders participated as equal partners in all steps of the research process. This study was designed to explore the experiences of people who use crack cocaine in Limerick city with the goal of informing interventions and services for people who use crack cocaine.

### 3.3 Participant recruitment and data collection.

Data was collected through 26 semi-structured interviews and a focus group made up of seven participants. Data saturation was used to determine sample size for this study. Study participants consisted of current people who use crack cocaine, local community representatives and service providers such as General practitioners, nurses, keyworkers, community workers and social care workers. Current people who use crack cocaine were recruited through the Ana Liffey Drug Project and the Limerick Drug Services while service providers and local community representatives were identified via the network of the research team, local networks and the study steering group. The inclusion criteria for research participants were people with a personal history of crack cocaine use within the last five years, people involved in addiction care currently and members of the public without a personal history of crack cocaine use but with experience relevant to the goals of this research. The exclusion criteria for this study were people who are unable to give informed consent.

**Table 1: Participant Profile**

VARIABLES	STUDY PARTICIPANTS (N=33)
People who use crack cocaine	26
Males	15
Females	11
Employed	2
Unemployed	24
Age range	24-57 years
Route of administration	
• Smoking	17
• Injecting	3
• Smoking+Injectin	6
Polydrug use	
• Heroin	19
• Benzodiazepines	3
• Cannabis	1
• Tablets (not specified)	2
Service providers	6
Local community representative	1

### 3.4 Procedure

Before the commencement of the research, ethical approval was obtained from University of Limerick hospital group ethics committee. The research was undertaken in three phases. Phase 1 involved the identification and recruitment of potential research participants using purposive sampling. During the recruitment process, information sheets which gave detailed information about the study were provided. Phase two involved data collection. Lastly, stage three involved data analysis and writing of research report. Before data collection, all participants were given consent forms to sign. Through these forms they were informed of confidentiality and their ability to exit from the study at any point. Additionally, they were informed that their information will be anonymised.

### 3.5 Data Analysis

Interviews and focus groups were audio recorded with the consent of study participants. Both interviews and focus groups were transcribed using Microsoft word. After this, NVivo software programme was used for the coding and thematic analysis of transcribed files. The first step in the coding process was the development of codes through inductive coding which is also referred to as open coding. As part of this process, codes were created from scratch based on the interview and focus group questions. During the coding process, codes outside the pre-created codes emerged and were named and included in the list of codes. After this, sentences in the transcribed files were placed under suitable codes. The next step was the identification of themes from the coded data. This was achieved using pattern coding.



# CHAPTER **FOUR**



# 4.0

## FINDINGS AND DISCUSSION

This section of the report outlines the findings of the research.

### 4.1 Findings: Characteristics of crack cocaine

Interviewees described crack cocaine as addictive in nature.

*"Once you put it near your mouth once, it's not that easy to get away from it. You know that's all I can really say it's not that easy to get away from"*

The feeling that people get from using crack cocaine is short lived. It was noted that it differs from one person to the other. It lasts approximately 30 seconds to 3 minutes.

*"I suppose some of the things in it that's different I suppose with the opioids is that it's a quicker hit. They say that it only lasts about maybe 3 mins of a buzz and then you need to smoke another rock and then another rock so it can keep going on for 48 hours, 24 hours on a high so that cost more money and as you know it damages the health".*

The cravings that come with crack cocaine use was described as a mental craving and not a physical one.

*"It's more of a psychological addiction than a physical addiction. Like your body doesn't need it like you would with heroin. But with crack, it's like the nickname for crack is more. So everybody calls it more because the minute you have a pipe you want another one straight away. Your body just craves it. It's all in the mind in the body. It's not an actual, you don't need it for a sickness or anything. Now you might make yourself believe you need it, but it's all in head".*

Participants described the feelings they get when using crack cocaine as happy, energetic/hyper and problem free.

*"My day will go fast you know. I have no worries you know. Not thinking of anything you know. Just thinking about like where will I get my next bag the following morning you know. Just have no worries about it".*

*"No, no. I want to be like up and doing things. Cos you get wild like you have so much energy. You need to be doing stuff like. It's crazy like".*

Participants also talked about isolating themselves when using crack cocaine.

*"As part of the high would be isolation. They'll rather be isolated in the room on their own. They wouldn't want staff to be even looking at them. I walked into the room one day to do a client check and the lads were in there, but you could see my presence made him so uncomfortable. Don't look at me, I don't want you to see me. They become more isolated from us and stuff. Even interactions have gone down anyway".*

*"I'm not really much out communicating with people no more and stuff. Before now everyone knew me in town. Now I kind of just stick to myself. Cos when you're having a smoke you do get chatty, but you don't get chatty to everyone you just get chatty to someone you trust. So, you become awareness then of people and you stay away from them cos you are on this high and you think oh no I don't want other people to affect it. Do you know, so you kind of stay away then from other people".*

With regards to paranoia, study participants reported being paranoid when using crack cocaine and when coming down from it.

*"Sometimes when I use crack I just sit down, and I feel paranoid out of my head. Like thinking the people passing they'll know that I'm on crack. How are they supposed to know I'm on crack like. People passing that's why when I'm not getting money in my cup sometimes, I think they know now that I'm on crack and I'm paranoid over that. But when I take a few tablets though it takes that away".*

*"After it yeah yeah like the paranoia when you're honest. Like you think everybody is looking at you. Like it's intense".*

When not using crack cocaine participants described getting moody, depressed and suicidal.

*"Moody, moody. Yeah. All different kind of moods. Feeling down in yourself feeling depressed and all that. It all comes in parcel with it you know".*

*"Just the depression coming down off it. Just when you're coming off it you just don't feel right. You're not in love with yourself and you think all the wrong things. Other than that then yeah. So, it's just coming down off it is just a very depressing thing to do".*

People also reported being anxious, angry, frustrated and having low energy when not using crack cocaine.

*"It makes you very anxious as a person when coming off it. When you don't have it you can be very unstable and anxiety kind".*

*"Like the anger in me and the frustration if I don't have it like".*

*"The days I don't have it, no energy and I wouldn't get up to do anything. Do nothing".*

## 4.2 Findings: Motivation for use

Study participants gave a range of reasons why they use crack cocaine. These reasons include being offered it by people, experiencing traumatic life events, stress, curiosity, using it to get over the sicknesses associated with using other drugs, the fact that its readily available and it gives a better high.

*"To be honest look six years ago I found my father dead. He died at the age of 72. I found him the next day dead and I just went out of control because I wasn't able to handle or deal with the situation. I was ill like at that time and couldn't use Heroin. And then I moved on to crack cocaine use. And then I went on to injecting".*

*"To try to get away from Heroin. Because I found that crack cocaine took the sickness away from the Heroin. That was just my story like you know. But now I've gotten on the methadone programme and stuff and now I found that I stopped smoking the crack sometimes like you know".*

*"First time I tried it I didn't like it at all. I didn't know what everyone was on about. I said it's not making any difference to me. What I actually realised the more roads I went down getting stressed is the more times I actually enjoyed it. The more stressed I was the more I enjoyed it. The first time I tried it I was alright, I wasn't stressed. Naa this doesn't make a difference. When you go down a different route then you start realising then you start liking it. It all changes then you know".*

*"Cause I was doing the heroin for so long and I found that I was kind of bored with the heroin buzz you know and I needed something extra you know and I wasn't getting it from the Heroin because I'm so immune . I wasn't getting anything from it. It was a waste of money. So when I done the crack cocaine I fell in love with the rush. You know the rush off it. There is an instant high off it. It's only literally about half a minute. But like it's like 30, 40 seconds. It's just euphoria. It's just really up there and high. And it's just like a great feeling in your body. Sensations through your body. It's beautiful, it's a lovely feeling. It's the best feeling in the world. At that time, you just forget about everything in life, just everything is just feels brilliant, you know? But then it's like you'd be crushed afterwards coming off it you know".*

Regardless of the reasons for their use most study participants described immediately getting addicted to it after their first use.

*"Oh straight away at the time of the very first time I had. It's more of a psychological addiction than a physical addiction. Like your body doesn't need it like you would with heroin. But with crack, it's like the nickname for crack is more. So everybody calls it more because the minute you have a pipe you want another one straight away. Your body just craves it. It's all in the mind in the body. It's not an actual, you don't need it for a sickness or anything. Now you might make yourself believe you need it, but it's all in head".*

Also, majority of study participants described getting a better high when they inject crack cocaine compared to when they smoke it.

*"As I said company again. I was always frightened of needles but it's just that rush that I used to get off it. It's a bad habit that I got into up injecting, and I just get that higher buzz from injecting. But I don't even get that anymore because I'm so immune to it now, I think".*

*"I just loved the rush. Really like I mean and it's so instant and fast instead of hanging around waiting for it, you know, and all that tension waiting, and smoking takes too long. I find it boring smoking you know after a while. You just whack it into the needle and bang like seconds there. You know. It's really high like you know that nicer".*

### 4.3 Findings: Polydrug use

All 26 people who use crack cocaine were also engaged in polydrug use. The most widely used substance alongside crack cocaine was heroin.

*"I had a Xanax problem also, so I have a lot of addiction. I have three. So like Xanax and heroin and crack cocaine. And they say even crack cocaine and Xanax are very terrible as well together they're very dangerous. But I'm on Xanax years and I'd done two. One Xanax and a benzo detox here".*

It was echoed through people who use crack cocaine and service providers that people are taking other drugs as a comedown from taking crack cocaine.

*"A lot of people who wouldn't have used Heroin are starting to use heroin now as a comedown from crack. So, they're smoking Heroin to come off the crack".*

Also, people are taking crack cocaine to support their addiction to other substances.

*"So cocaine use in the general community it keeps drinking going as well. 2, 3, 4 o'clock in the morning the more cocaine you take the longer you go, the more you can drink".*

### 4.4 Findings: Overview of crack situation in Limerick

Study participants expressed concerns about the local crack cocaine market in Limerick. These concerns were in availability, accessibility, quick progression, young people's involvement in the crack cocaine market and the quality of crack cocaine.

#### Availability and accessibility

It was highlighted that crack cocaine is easily accessible and readily available in Limerick. At the beginning people had to go to specific places to access it. Now it's available in every part of the city. Also, people are being offered it when they are walking around in town.

*"It hit limerick like snow. This crack did. I don't care what anyone has to say. Every corner you go around here, they'll have the white there if you are looking, then another corner I have the brown there if you are looking. They are texting my phones every time. I have this, I have that. I am going to get a new sim card that's what I'm going to do".*

*"I don't know cos when it first came out not really many people knew about it but now it's like every second is on it around the place. It's after getting very big around the place. Before you have to go to one area to get it but now you just get it wherever you choose. It's everywhere".*

### **Quick progression**

Participants described how quickly crack cocaine has become popular in Limerick and the fact that people who you wouldn't suspect are also using crack cocaine. Its quick progression has been visible in the last year and half.

*"No, it's just the amount it's taken over Limerick at the moment is unbelievable like. Its 100% after taking over the whole town. Every second person now is using it. Do you know. If it's doing that already in a year and a half what's it going to do in another year to Limerick. The way its progressing is mad. Do you know it really is. It's really scary the way crack is progressing".*

### **Reduced quality of crack**

It was noted that the quality of crack cocaine being sold in Limerick keeps on depreciating. The lesser the quality of cocaine, the weaker the crack cocaine. One implication of this is that people have to use more to get the kind of feeling they desire.

*"Like when it hit Limerick first there was guys doing it and it was like 70% purity. I was getting stuff that like it was .7-point 70% purity like very very strong you know. Mostly now today you might be lucky if it's 20 or 30% pure, but this time they were starting out. They've done it like 70% purity, got everyone hooked and then they kind of made it weaker and weaker as they went along, you know?".*

*"It's not proper cocaine that we are getting in here. Its shit crack cocaine. You can get good stuff you can get shit stuff around the place. Some of it is just all bicarb. You know the stuff they mix it with. Baking soda, bicarb, carbon dehydrates whatever they call them. I do not know all the stuff they mix them with. That's all in it. It's disgraceful. I wish I had never ever come to Limerick. I would have stayed clean if I didn't come near Limerick. I wouldn't have gone near Heroin again as I was off for two years".*



## Reduced price of crack

The price of crack cocaine has reduced overtime. The reason for the reduction in prices has been mainly attributed to competition between dealers.

*"Big time. You can get a bag nowadays for a tenner. Do you know. Before it used to be 20, 25 now you can get one for a tenner so big difference".*

*"They're all competing with each other. It's like they're not going to war but they're definitely competing off each other. This guy goes down a fiver this will go down a fiver. At the end of the day, they're still making money they don't care".*

## Stigma and crack use

People who use crack cocaine experience stigma surrounding their crack cocaine use. This stigma is in the form of name calling, discrimination and is meted out by members of the public, other people who use drugs and services.

*"Yeah. In a judgey kind of way. Like they are looking down on me like I'm a little dirt bag or I'm a piece of shit as I go out like. Not worth helping up like. You know that's how I feel about people looking down on me. And I get angry and I say come back if you've gone through my life come back and talk to me then like. Do you know".*

*"Can you believe a lad that you all know got a new doctor and he came to me and said you go to him. I'm just going to introduce myself to him and if I go on my own, he won't take any notice of me. So I walked in with him. He had an appointment he went in, and the doctor said you, you're getting fucking nothing off me. He didn't even say hello or nothing. That's only his first day nothing personal. He says I'm only here to introduce myself to you and get to know you and he says you're not getting nothing off me. I couldn't believe it I was sitting there".*

It was also observed that due to the stigma associated with crack use, crack users hide their crack use. An implication of this is that it will prevent them from getting the support they require.

*"But there seem to be another layer of shame. You can get the lads to talk about Heroin and every conversation I've had with the lads I'd be direct enough to ask what are you using. They don't want to identify as using crack and even getting that information".*

## 4.5 Findings: Consequences of crack cocaine use

### Physical health

The physical health implications of crack cocaine use are chest and throat problems, damaged lungs, blood clots, weight loss, body pains and damaged teeth.

*“Some people call it a crack lung. The crack is after getting all on your lung. That you need crack to breathe. But it’s not doing no good. It’s doing you good at the moment but at the long term its fucking you up”.*

*“Basically, before I was as fit as a fiddle but now not as best as I used to be. If I took a jog now my chest and all will come at me. But before I used to be able to run in races. I can see it happening on my chest and stuff you know what I mean. So that’s how it kind of would affect me big time”.*

*“My partner has lost [their] leg due to crack like. From injecting crack cocaine like into [their] groin and [they’ve lost [their] leg recently to it. And I have blood clots now in my leg from crack cocaine”.*

It was also evident that the attention paid to personal care by crack users has depreciated

*“To be honest I’m not showering. I barely wash my face. It’s getting a hold of me. That’s not me like. I’d have a shower in the morning, and I’d have a shower at night before bed. Now, I’ll be lucky to wash my face. So, like I said as I seen my child walking, I just want to get myself back on track. I really do. I’m ready now this minute to go”.*

### Mental Health

The physical health implications of crack cocaine use are psychosis, depression, anxiety and paranoia. Study participants also described experiencing suicidal thoughts and self-harm which was attributed to their crack use.

*“I find it very hard to get motivated to do things. So, when I wake up in the morning and dressing myself whatever clothes, I see, I throw it on. I cry like every day. Just really bad depression, everyday bad anxiety so my mental health is really bad and that’s affected my physical health too”.*

*“Definitely, my anxiety and paranoia has gone up. Like when I take it like I do see people, hear people that aren’t even there. I swear to God like it’s crazy”.*

## Anti-social behaviour and criminality

Anti-social behaviours and criminality such as stealing/robbing, verbal aggression and fighting are associated with crack use. Study participants attributed stealing/robbing to getting money to sustain the costs associated with their crack use.

*"Yeah, I definitely did do like crimes like stealing, taking clothing just to sell them, so maybe clothing worth maybe 100, 200 euros and we just sell them for even it could be only just 20 euros just to get your hit or your just your one or two pipes of crack. You know you're so yeah, yeah".*

*"Yeah, I definitely did do like crimes like stealing, taking clothing just to sell them, so maybe clothing worth maybe 100, 200 euros and we just sell them for even it could be only just 20 euros just to get your hit or your just your one or two pipes of crack. You know you're so yeah, yeah".*

## Socio economic impacts of crack

Employment: Study participants described how their crack use has affected their jobs. Some of the participants had promising careers but are no longer able to work because of their crack use. Some of the reasons why crack users are unable to work were attributed to lack of interest, being unreliable and the negative effects of coming off drugs such as mood swings, depression and isolation.

*"The drugs. When you take drugs and you come down, you'll be sick off it like. And that stopped me from doing work and being high from gear you can't be really trusted because it's a downer you are too relaxed, and you are going to make mistakes".*

*"I have a great career. I'm a qualified \*\*\*\*\* the past 15 years, I've always had a great career. I had everything. I was the \*\*\*\*\* for the biggest names in Limerick. I was doing \*\*\*\* for TV for everything. I had a great life and then crack took it".*

## Housing and crack:

With the exception of one interviewee who was homeless at the time of the interviews, all the other interviewees were either staying with family members, in emergency accommodation or in rented apartments. However, it was noted that all the 26 study participants have been in and out of homelessness at some point in the last couple of years because of their crack use. The reasons for their homelessness were relationship breakdown and inability to adhere to their tenancy agreement such as excessive partying and having too many people in and out of their accommodation. It was also noted that non-payment of rent was not a common reason for homelessness whenever it occurred.

*“Definitely yeah, I was on Heroin and then I was on the other one first cos then I was allowed back but then with crack my family just don’t talk to me so I obviously don’t remember to pinpoint like why they don’t talk to me but it must have been really bad because they have no contact with me what soever, I can’t go home anymore so I’d say it wasn’t like that with Heroin. When I started taking crack everything started to fall apart and no one wants anything to do with me anymore cos I have that bad of an addiction”.*

### **Money and crack:**

The financial burden associated with crack cocaine use was highlighted as being problematic by people who use crack cocaine and service providers. It was emphasized that because the hit obtained from crack is short lived, crack users have to spend a lot of money to sustain the high. This leads to them spending all their money on crack. The implication of this is that there tends to be no money for basic their basic needs such as feeding, accommodation. Also, they tend to involve themselves vices such as robbing, prostituting and begging on the streets to keep up with the financial burden. Additionally, in some instances crack users end up incurring huge debts because of their crack use. This does not only affect them but also their families. This is because in situations that these debts are not paid, debtors end up harassing, threatening or in some cases assaulting their family members.

*“Whatever money I’d have I will spend it no matter what. If I had a 1000 pounds, I will spend it like. I had 5000 pounds I spent it like. When I got a claim, a compensation claim I spent 5000 on it like”.*

*“With the debt I have a feeling that the dealers will be kind of risk managers so they’d know who is cash upfront or who they can log a debt to. Particularly if they have a bit of leverage over somebody’s family, families can be highly traumatised over debt as well not only the individual. So \*\*\*\* spoke about the mothers being desperate and destitute with their children. They are in debt, so they are not going to be using drugs or using crack or prostituting. They are also in debt cos those debt can go to their family home or something”.*

### **Relationships and crack:**

Study participants described how their crack use has affected their relationship with their loved ones. The issue of relationship break down was mostly attributed to behaviours associated with drug use such as aggression, mood swings, excessive demand of money and harassments from debtors.

*“Definitely yeah, I was on Heroin and then I was on the other one first cos then I was allowed back but then with crack my family just don’t talk to me so I obviously don’t remember to pinpoint like why they don’t talk to me but it must have been really bad because they have no contact with me what soever, I can’t go home anymore so I’d say it wasn’t like that with Heroin. When I started taking crack everything started to fall apart and no one wants anything to do with me anymore cos I have that bad of an addiction”.*

### **Risk taking and crack:**

Crack users and service providers highlighted the risky behaviours that crack users get involved in to sustain their crack use. These behaviours include selling sex to earn money and snowballing. The most emphasised of these behaviours is snowballing. Snowballing is injecting both heroin and crack cocaine together. Study participants attributed snowballing to a better high/feeling. It was noted that snowballing can be fatal. This is because crack is described as an “upper” which means it increases the heartbeat while heroin is described as a “downer” which means it slows down a person’s heartbeat. As a result, combining the two substances increases the chances of a person overdosing.

*“Now what they are doing now is that they are putting 2 into one part, they are putting the crack and the heroin into the one part, and they call it a snowball, but I have never done that. I have never ever done it once in my life. And I never will do it either. A snowball is very dangerous they are putting a full bag of crack and a full bag of heroin or even two bags of crack and a full bag of Heroin. I have seen people do it with my own eyes. They are taking it and then they are out of their heads they don’t know what they are even doing. They are mixing the two, one is an upper and one is a downer your heart is just going to blow”.*

*“That’s because one is a low. Like Heroin is an opioid. So, crack cocaine is a high. So, the two of them combined together is gonna be fatal. Like I really thought I was gonna die that day when I took it. That’s why I said I will never ever take it again cos I. It wasn’t for me. I know plenty of people that do it today and they will do it 5, 6 times a day”.*

## 4.6 Findings:

### Responses and Interventions

Service users and providers described the responses available with regards to crack cocaine use in Limerick. It was noted that services were mostly harm reduction focused. Provision of drug paraphernalia, key working, counselling, meetings/support groups, access to a general practitioner, accommodation support and employment support were identified as core interventions available to people who use crack cocaine.

*"Like you get your exchanges here, you get a friendly face. You always get somebody to talk to like I can truly say hand on heart, that each and every person that works here. They don't just do a job, they really do care about you about that person, about your life, about what's going on. You know I was going through a tough time recently and the guys were there for me 100%. You know, anytime he did talk. To them, probably having a lower day or bad day, they were always there".*

*"Ana Liffey has been helping me. I'm also an alcoholic...Ana Liffey, we were just with my GP now we were and we working and things to go to Beaumont to help me with the crack to get off the crack cos its more mental than anything like so. So go and get off the drink and the crack at Beaumont. Hopefully it goes well like. You need to get out of the environment to get off because they're not going to. When you know you can get it, you're not going to get off it".*

Service users described how they got to know about services. Some got to know of services through friends and family, keyworkers, prison services, outreach worker and homeless hostels/emergency accommodation.

*"I was begging in the street and \*\*\*\* actually came and approached me and he told me about the needle exchange here and then when I came here to get tin foil or whatever I was speaking with people and then I found out that there are more services here".*

*"When I moved into my apartment after being homeless my landlord linked me in with Slainte and this place. Yeah, she was very helpful like".*

Service users expressed their worries that there was no drug like methadone they can take for their crack cocaine use. It was also noted that service users had limited knowledge on treatment options for their crack cocaine use.

*"You see I don't know anything cos I don't know what in severe ways you would need to use. But I do know for a fact that if you get sick off the crack there's no way you could go like Slainte for Heroin there's nowhere like that for crack. You can't go any-*

*where to get your sickness cured like with methadone or anything cos that doesn't work for crack, so I don't know where you actually go. If you are sick from crack, where do you go? Do you know I think you have to reuse again just to get over your sickness. I don't think there's anywhere you can go to".*

Service providers described the importance of coordination between services and building relationships with services as it helps enhance service provision.

*"And this is how we build relationships with other services cos I suppose there's a tendency there as well with services oh this is my baby that's your baby whereas with the people here, we are all on the same page we're all the same people so there is no point in any of us being dismissive to each other. We need to help each other. And again, the person that we're dealing with is the person that we need to think of. Not about where we're from of what we're working for. And it's about that relationship".*

*"Related to that I think relationship with the service users involving the relationship with their agency is key cos you're dealing with someone you can say If I ask \*\*\*\* to come in, will you talk to him. And they ask who is \*\*\*\* and I say I know \*\*\*\*\*. Immediately they don't feel like they are walking into somewhere strange where they don't know anyone and it's terrifying. Very often \*\*\*\*\* will come out and meet with them".*

## **Barriers to service provision and access**

Several challenges were identified by crack users and service providers with regards to access and provision of services for people who use crack cocaine. These barriers were identified as lack of trust in services, strict requirements with regards to access to treatment, long wait times, inability to keep up with appointments, inadequate social care staff and inadequate funding.

*"When I went to rehab, I tried to go into \*\*\*\*\* in Cork and they said they wouldn't accept anybody who uses crack cocaine or heroin. You have to be five days [drug free] because of the risks like you could be violent coming off and things like that so they wouldn't take me till I was clean, and I couldn't get clean by myself".*

*"I don't go their cos I don't trust them. Cos I went into a meeting one day and it was all supposed to be confidential, and I went into the shop next door to get a bottle of coke and came back and \*\*\*\*\* was out the window to my mother telling her everything. He's a counsellor so I don't have faith in no one to be honest only \*\*\*\*\*".*

*"There have been many times like that that we would be waiting for a bed for a long time and then I kind of loose interest in going do 'you know. When it took too long I lost interest and ended up getting worse"*



*"It actually brings us to whole polydrug use issue. Our services we're really up against it. Our funding is brutal, it has never been improved. We don't have enough stuff. Like we are holding up against people that are really unwell, really, really entrenched in their addiction. All of them are dual diagnosis and you're meant to do them all on the same funding and the same staff as you are 10 years ago".*

Lack of understanding of dual diagnosis was identified as a major concern with regards to service provision. This is because most crack users also suffer from mental health crisis. As a result, there is the need for services that can address both their addiction and mental health.

*"There's a lot of dual diagnosis services due to be kick off hopefully by the end of this year I'd say. There's a lack of understanding on dual diagnosis so if people are presenting in crisis with their mental health to the local crisis team you're being sent away or else we'll address their addiction. So, it all boils down to their addiction, it all boils down to what they've taken. So they're falling between two stools all the time".*

The need for services to be respectful and non-judgemental towards crack users was emphasised.

*"I wish. I wish. But I suppose that would be one side another side of it I suppose our clients are not capable of going to the dentists and sitting there for an hour. You can forget about it. Any of their treatments they're not gonna be seen cos they can't wait you have to understand that they're in addiction, they're looking for their fix, they're sweating profusely, they're agitated. How do you expect them to go to the dentist and sit there".*

### **Recommended Services/interventions.**

Service users discussed some services and interventions they would like to have access to with regards to their crack use. These services include supervised injection facilities, more residential treatment centres, 24-hour services which can provide drug paraphernalia, more counselling services and meetings, health promotion materials on crack cocaine and its adverse effects and an activity centre.

*"I was watching this thing about Canada and safe places to use and staff like that. That'll be brilliant. You know a lot of thefts and all. I know there's no substitute to crack. There has to be some way to fecking. Some type of substitute. Like for Heroin you can give methadone. If you can give something and the that will stop off our heart racing and everything. I know you can't there isn't nothing for it. I was watching this thing. Canada, I think the way they have a system over there is brilliant. Its way different. You can go into a place where there's doctors you can use safely, and do you know what I mean".*

*"A 24-hour service like. If even at night-time that's when a lot of us use our drugs at night. I know it's pretty hard to get a 24-hour service but if they have a drop-in centre or a 24-hour service where we could ring up and meet them or they meet us with clean paraphernalia. Me as an addict I know when I was smoking, I use. If I want a high, I will use whatever is there whether clean or dirty I'll use on myself".*

The need for professionals working in addictions to get on the ground training in addiction services while in college was highlighted by service providers.

*"And I suppose the other side there is coming out of college people should put stems on the lecturers or whatever. Professors should come down here and put people in here as part of their career and see it first-hand cos you gonna see it first-hand in any of these services in here. Especially the social workers especially with people who are not familiar with the running of these services. They need to come in and be part of this regime".*

*"We have paramedics now coming in with us two days. Just their first year in paramedics. What I love to get in here are mental health nurses. Those training to be mental health nurses just to get them in and see how dual diagnosis is".*

Service users emphasised on the need for detox centres in treatment services where they can go in for a detox and go straight into treatment from there. They also emphasised on the need for longer treatment programmes and access to stabilisation houses after treatment.

*"I went to \*\*\*\*\* already. It's a detox unit. It's a three-week programme and when the 3 weeks is up, they put you back in the community. That's no good for me in the end so I want to get into treatment to detox and then go to high park not back here to the community".*

*"Because I'll end up using crack after coming out of the treatment centre. Three weeks programme is no good unless you are going into treatment after that. And then into a halfway house after that again. See I have a goal in my head like. To go to a treatment centre, go to a detox unit in Beaumont then go to high park but I have the assessment done already. Only when I'm down on the methadone".*

*"It's cos they are not stable. They can't just get into treatment centres say when on the methadone. But Beaumont hospital you can. They have a detox unit you see. They can take you in there. Whereas they can't take you into the treatment centre when you are on the shit. But when you go to a detox unit its detoxing you off the drugs. But when you go to the treatment centre you can't go in on drugs. That's the difference. They detox you first and then they put you into residential treatment and then after they put you into a halfway house. I was in there I've done it all before".*

## 4.7 Findings: Harm reduction-Awareness

Study participants discussed their understanding of harm reduction procedures with regards to their crack cocaine use. The following were outlined by study participants as the measures they take to reduce the harm associated with their crack use. The use of clean drug paraphernalia, awareness of their environment when using due to the risk of overdosing, awareness of the impact of crack cocaine when used consistently and in high doses, avoiding snowballing due to high risk of overdosing and smoking rather than injecting.

*"With crack cocaine you have to always have your own pipe and never give it to anybody to use because there's lots of saliva".*

*"To reduce the harm. Like I never, ever ever done snowballing. That's a big step like you do that you know you're not going back like. It's meant to be the nicest feeling that you get in the world. That's what they all say. People that have done it. I would never do it like".*

*"And you know, but I am very aware of things too. Like if I was next door, with someone in the next room I might say look if you don't hear me in a few minutes will you knock in and check on me. I mean, you know I am quite aware to say these things, you know, and I wouldn't lock my door behind me, no just in case, they would need it open or you know I'm quite aware like that. But there is sometimes".*

Some study participants believe that there is no way to reduce the harms associated with their crack cocaine use.

*"There is no really safe way right because I think, I know the way it affects me but with other people it affects them completely different like. I'll say my chest is a lot wheezier from smoking it, coughing out ablated phlegm but I don't know any safer way. Don't really know like. There'll be no safe way to smoke it I think. Its gonna harm me whatever I do"*

It was noted that study participants were unsure if naloxone can be used when overdosing on crack cocaine.

*"There is. You could use among people because using on your own isn't safe just in case anything happens so it's always better to have someone beside you and I don't know does naloxone work with crack if you overdose on crack. I don't think so I don't think there's anything that you can use to bring you back or anything so just use around people I suppose. That's the safest you could do in case anything happens to you".*

## 4.8 Findings: COVID-19 and crack cocaine

People who use crack cocaine and service providers described how the COVID-19 pandemic affected their crack cocaine use, access to services, provision of services, supply and prices.

With regards to their crack cocaine use, some people reported increased crack cocaine use while reporting reduced crack use. For those who reported increased use, the reason for this were mainly boredom as a result of lockdown and lack of services. For those who reported reduced crack cocaine use, the reason for this was their inability to go tapping as a result of the lockdown.

*"Because there was nothing to do and I had money like that you couldn't buy nothing. Shops everything was closed. Like for clothes wise things like that. So I always kind of had extra money, so I used to just end up spending it on drugs and taking more drugs to be honest and so I did. I think so yeah, I think I found it harder".*

*"It did it did. Cos you see normally I would sometimes tap for my money to use. But with the COVID going on there was no one in town so you wouldn't get much so yeah it did it did. You could only kind of use if you had the money. Other than that there was no ways of going about it like. So, it did, it did affect usage big time".*

When it comes to the access to crack cocaine during COVID-19, service providers and crack users reported that supply/access did not diminish. Crack cocaine was still readily available when needed.

*"Not really. I don't really think so. I could get access to an up or down in the COVID or not even with the COVID. When we were on lock down, we still get this stuff, you know. So no, it never really affected my usage. You know, if I wanted, I could get it, and if I didn't, no, I just think it just. Some people it might do that for, you know. For me it didn't personally affect me. I didn't treat the COVID different than any other time. I just stayed in when I had to, but I always had access to my own stuff, like, even if I had to get someone I know to wash it up for me or something I'd always get it, you know".*

*"Absolutely cos the only reason we had a look at our contingency plan so. We were looking at the TEP in terms of everything shutting down, fairly stopping where the drugs were coming from. Biggest thing is we were going to get into sickness, overdose, withdrawal. Never happened. The supply just kept coming and coming".*

Service providers also reported people relapsing on crack cocaine because of COVID-19.

*"I think there's another thing we are forgetting during the cause of drug use is the COVID. You know for the last couple of years we've worked with people that were doing good before the COVID. Their drug use had stopped and the next thing all of a sudden everything closed, services closed, and they're left on their own and crack just happened to come on the street".*

People who use crack cocaine reported that prices of crack cocaine did not reduce during COVID-19.

*"It did now. It was 20 euros for a bag of crack now it's a tenner. It increased. It was high out".*

### **COVID and crack cocaine: Service change.**

Service users and providers highlighted how the pandemic affected access to and delivery of services. While some service users reported that there were no major changes in services others reported that services changed. However, service providers reported major changes in services. Some of the changes that occurred in services include phone consultations rather than in person services, the close down of some services, reduced access, stricter conditions of access and reduced quality of services.

*"It did a bit because, you know you had to ring over the phone all the time. It wasn't as personal then. It wasn't as good. It didn't feel as intimate the counselling. And you mightn't get the person in for. It could be with someone else. It was cancelled and being booked back in and forward. It did affect a lot of people. The ones it did affect that definitely".*

*"It was harder alright cos most services weren't really active and stuff they were kind of working from home and stuff, but the main places were kind of still open. So the services were kind of still there but just harder to get through to if you needed them".*

*"No, not really. If you needed help, there was always someone to help there because there is plenty of like people you can ring. You know like 24 hours and stuff like that".*

Service providers noted that there was increased demand for services. Additionally, there were new presentations to services that staff were not familiar with.

*"We used to have a drop-in service 2-4 on Monday. You might get one, you might get two if you're lucky and people would say they'll be down. But I suppose we've seen an increase during COVID. People that were never familiar with services or we were never familiar with them have come on the waiting list. We have a client 57 and he's only*

*coming on the methadone for the first time. So COVID has brought a lot of people that we weren't familiar with. Even some of the youngsters we didn't even know they were on it and you wouldn't have known and they've come to the forefront because of COVID".*

One major concern that was highlighted by service providers was the high level of burn out among their staff as a result of the staff shortages during the pandemic. Also, lack of support for staff was highlighted.

*"We just changed our lifestyles to accommodate service users' cos we were dealing with them and they're entitled to services. And just because they had COVID we went to their apartment and again I suppose we learnt a little bit more about them. Some of them didn't have food at the time which we didn't know. Some of them were living in dire space that we didn't know. I ended up getting bags of food from the mid-west simon and delivered to here so we would take them to houses and deliver to them".*

*"But then apart from that. It's pretty much. If you don't stick your hands up and look for support, you try your best to as to link in, but I was flooded with staff cos I had to keep the service going. I had staff doing 200, 220 hours a month. You know so that's what needed to be done".*

## 4.9 Findings:

### Environment and crack cocaine use

Crack users described how their environment impacts their crack use. The major concerns highlighted were increased use because of their environment. Also, relapsing due to cravings, flashbacks and being in the company of other users was.

*"Yes, that does affect it. Yeah, that does big time. Cos you can be gone out the door and you might have a tenner and say no I won't use today but if someone throws it out Infront of you of cos you're gonna get it like. It's like bringing a child to the shop they're gonna want sweets or taytos when they see them you know so yeah it does affect big time".*

*"If you're in a place that there's a lot of people using it, it's difficult and that's why I'm finding it difficult. It's one of the reasons I'm finding Relapsing: due to cravings, flashbacks, being in company of other users.*

*It's difficult at the minute. As like I only have to knock in next door and like I can have it. I can smell it in the air when I walk around. That smell alone would drive you back. It's something with the head it's something clicking in your head when you smell it. You go running for it."*



A collection of white, hand-drawn geometric shapes, including zig-zags, chevrons, and rectangles, scattered across the top half of the orange background.

# CHAPTER **FIVE**



# 5.0

## CONCLUSIONS AND RECOMMENDATIONS

This report has described the experiences of people who use crack cocaine, service providers and community members with regards to the health and social impacts of crack cocaine use in Limerick city as well as available services for crack users.

Additionally, this report also outlined the impact of the COVID-19 pandemic on crack use and services. It was noted that there are high levels of burnt out among service providers due to the changes to services and high demand for services because of increased crack cocaine use during the covid-19 pandemic. There is the need to ensure sufficient supports, resources and infrastructure are in place for service providers.

The findings of this research will add support to the current National Drug Strategy 2017-2025 which focuses on a health led approach to drug and alcohol use in Ireland. Reducing the harms caused to individuals, families and communities by substance use is a core goal of the strategy (Department of Health, 2021) and that is the focal point of this research. As outlined in this report, there are services available for people who use crack cocaine in Limerick city. However, there is the need for more crack cocaine focused services and interventions. The recommendations below originate from the findings of the research and review of literature. These recommendations are aimed at supporting future local crack cocaine policies and interventions.

### 1. Outreach

The findings of the research showed that one of the consequences of crack cocaine use is isolation. This reinforced the need to have flexibility in existing outreach services to be targeted towards people who use crack cocaine. This could be in the form of extended outreach hours to evenings and weekends. This extended outreach service could be tailored to demand to incorporate some combination of home visits, phone calls and street outreach in response to client's needs. This is in line with one of the six strategic priorities to be implemented under the Mid-term review of the national drug strategy 2017-2025. This strategic priority is to enhance access to and delivery of drug and alcohol services (Department of Health, 2021).

According to EMCDDA (2018), crack cocaine focused harm reduction programmes are constrained in Europe. In Ireland, there have been advancements in this area through the adjustment of services to meet the needs of people who use crack cocaine. These have been in the form of out of hours services and crack cocaine related harm reduction services (National Advisory Committee on Drugs and Alcohol, 2007). For instance, the Ballyfermot Advanced Project runs an out of hours outreach service which is an extension of its outreach service. The aim of this service is to target clients who find it difficult using services during normal hours. According to a report by the Ballyfermot Local Drugs and Alcohol Taskforce, the out of hours outreach has improved support to those engaging to access the support they need with regards to their physical health needs (Ballyfermot Local Drug and Alcohol Task Force, 2020).

An evaluation of an existing outreach service recommended that, it is important for outreach workers to target the networks of people who use drugs rather than individuals (Corr, 2002). This can be achieved by developing a peer-based initiative or approach which is evidence based. Internationally, peers have been recruited to connect with people who use drugs - with the aim of connecting them to services and reducing the harms associated with active substance use. For instance a peer-led needle exchange programme, in Vancouver, enhanced the service reach to individuals not normally engaged by proto-typical programs (Hayashi et al., 2010). Also, the rate of health information exchange has been observed to be greater for peer-based needle exchange programmes compared to the non-peer-based ones (Hay et al., 2017). Opportunities for meaningful peer involvement in service responses should be continually sought.

## **2. Mental health**

As identified by the research, crack cocaine use has an adverse impact on the mental health of its users. As a result, there is the need for enhanced coordination between drug services and mental health services. Additionally, there is the need for more education and training on dual diagnosis for individuals working in the field of mental health and addictions. The current National Drug Policy 2017-2025 advocates for people with co-occurring addiction and mental health issues (Department of Health, 2021). As a result, the establishment of specialised dual diagnosis teams nationwide is currently an action. Additionally, sharing the vision, the national mental health policy recommends a tiered model of integrated services for people with dual mental health and addiction issues to ensure improved outcomes for individuals (Department of Health, 2021).

## **3. Crack cocaine focused services and interventions**

It was noted that the provision of drug paraphernalia for people who use crack cocaine (crack pipes, foil and injecting equipment) has been very impactful and should be continued. The findings of a study in Canada that evaluated the impact of crack pipe distribution services on the negative health impacts associated with crack cocaine use concluded that, the expansion of crack pipe distribution services has possibly reduced the health-related harms of crack cocaine use (Prangnell et al., 2017).

Lack of services and interventions that focus on crack cocaine use was also highlighted. As a result, there is the need for the expansion of current addiction services to accommodate people who use crack cocaine. This would include crack cocaine specific rehabilitation and treatment centres. A review of four specialist crack cocaine treatment services in the United Kingdom revealed that people who use crack cocaine in residential service adhered to treatment regime and successfully abstained from crack cocaine use during their admission (NTA, 2007). The benefits of residential care for people who use crack cocaine have been associated with the temporary detachment from unfavourable environments associated with their crack cocaine use (European Monitoring Centre for Drugs and Drug Addiction, 2007).c

In Ireland, three pilot crack cocaine specific treatment interventions were established in Dublin. These pilot projects were delivered through the Community Addiction Programme (CARP), Jobstown Assisting Drug Dependency (JADD) and New Hope Residential Centre (NHRC). These projects made use of three main approaches which are the Community Reinforcement Approach, Contingency Management Model and the Rugby House Model. An assessment of these projects facilitated an evidence-based analogy of two crack cocaine intervention models (Community Reinforcement Approach and the Rugby House Model). It also provided the prospect to examine the delivery of the Rugby House Model in a residential and community setting. It was established that, both models led to positive outcomes; however, the Rugby House Model tools are not relevant for a residential setting (Frances, 2019). Such pilot projects can be established in Limerick.

Existing literature has demonstrated that social stigma significantly influences engagement of people who use drugs with the health care system (Brandon et al., 2020). Stigma against drug use has been found to be greater compared to other forms of social stigma such as stigma with regards to smoking, obesity and mental health (Barry et al., 2014). To mitigate the stigma associated with substance abuse, peer partnership can be imbedded in crack cocaine treatment programs as it has been linked to positive behavioral health outcomes for individuals in recovery (Bassuk et al., 2016).

#### **4. Criminal Justice**

Due to the increased availability of crack cocaine, coupled with the anti-social behaviours and criminality associated with crack cocaine use - there is the need for improved engagement between An Garda Síochána/Probation Service/Courts and addiction services. This recommendation is also in line with the findings of the mid-term review of the National Drug Strategy 2017-2025 where it was recognized that the health led approach is in unison with the work of law enforcement to decrease the supply and accessibility of illegal drugs (Department of Health, 2021). One of the key actions of the current National Drug Strategy 2017-2025 was the establishment of a working group to consider alternative approaches to the possession of drugs for personal use. After considering the recommendations made by the working group, the Irish government decided to implement a health diversion approach. Under this approach, people found in possession of drugs for personal use are diverted to the Health Service Executive for a health screening and brief intervention with a health professional known as SAOR (Support, Ask and Assess, Officer Assistance and Referral).

Where necessary, people with high risk of problematic drug use are offered referrals for treatment and other supports (Department of Health, 2017). Peer input into the implementation of such laws is recommended to ensure that there are opportunities for rehabilitation rather than a punitive and stigmatising approach. Also, the Garda Youth diversion programme which was officially launched under the Children Act 2001 is a programme aimed at preventing young offenders and children involved in anti-social behaviours in Ireland from entering full criminal justice system. The planned outcome of this programme is to deter young people from committing further offences and/or anti-social behaviour (Citizens Information, 2020). In Limerick, there are three Garda diversion projects located in Ballynanty, Irishtown and Kings Island.

## **5. Awareness**

It was noted that people who use crack cocaine did not have much information prior to their initiation into its use. Also, some service providers have limited knowledge when it comes to crack cocaine use. There is the need for more awareness creation with regards to crack cocaine and its use. This can be in the form of trainings events and health promotion materials such as posters, mass media campaigns and information booklets. Peer partnership should be engrained in awareness creation. This can be in the form of peer education. Peer education is often used to effect transformation at the individual level by attempting to modify a person's knowledge, attitudes, beliefs or behaviours. The evaluation of a project that involved a small group of peer educators providing one to one education to create awareness on drug use in Cairns concluded that the project led to an increased involvement by street kids in local drug prevention programmes (United Nations Office of Drugs and Crime, 2003).

This is line with one of the strategic actions of the current national drug strategy 2017-2025 which is to improve the delivery of substance use education across all sectors (Department of Health, 2017). Having knowledge and information has been noted as the first and necessary element in developing healthy behaviours (Miller, 2017). Additionally, studies have proven that, making information about the adverse effects of substance use will encourage abstinence from substance use (Sussman et al., 2007; Twombly & Holtz, 2008). Furthermore, peer involvement in community awareness events, can reduce the stigma around crack cocaine use.



# REFERENCES

- Afonso, L., Mohammad, T., & Thatai, D. (2007). Crack whips the heart: a review of the cardiovascular toxicity of cocaine. *Am. J. Cardiol*(100 ), 1040 - 1043. <https://doi.org/http://dx.doi.org/10.1016/j.amjcard.2007.04.049>
- Andrews, P. (1997). Cocaethylene toxicity. *J Addict Dis*, 16:75-84. [https://doi.org/10.1300/J069v16n03\\_08](https://doi.org/10.1300/J069v16n03_08)
- Armitage, J., Bowman, L., & Wallendszus, K. (2010). Intensive lowering of LDL cholesterol with 80 mg versus 20 mg simvastatin daily in 12,064 survivors of myocardial infarction: a double-blind randomised trial. *Lancet*, 376:1658-1669. [https://doi.org/10.1016/S0140-6736\(10\)60310-8](https://doi.org/10.1016/S0140-6736(10)60310-8)
- Ballyfermot Local Drug and Alcohol Task Force. (2020). Ballyfermot Local Drug and Alcohol Task Force CLG Annual Report 2020. [https://ballyfermotldatf.ie/wp-content/uploads/2021/11/2020\\_annual\\_report\\_final.pdf](https://ballyfermotldatf.ie/wp-content/uploads/2021/11/2020_annual_report_final.pdf)
- Barry, C. L., E.E., M., Pescosolido, B. A., & Goldman, H. H. (2014). Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. *Psychiatr Serv*, 65(10):1269–1272.
- Bassuk, E., Hanson, J., Greene, N. R., Richard, M., & Laudet, A. J. (2016). Peer-delivered recovery support services for addictions in the United States: a systematic review. *Subst Abuse Treat*, 63:61-69.
- Baum, M. K., Rafie, C., Lai, S., Sales, S., Page, J. B., & Campa, A. (2010). Alcohol use accelerates HIV disease progression. *AIDS Res. Hum. Retrovir* 26, 511–518.
- Berbesi Fernández, D. Y., Segura-Cardona, Á., Montoya-Velez, L., & Hernández-Rendón, M. (2016). Consumption of crack cocaine in injection drug users in Colombia. *Revista Cubana Salud Publica*, 42, 276–283.
- Bouscaillou, J., Evanno, J., Prouté, M., Inwoley, A., Kabran, M., N'Guessan, T., Djé-Bi, S., Sidibé, S., Thiam-Niangoin, M., N'guessan, B. R., Blanchetière, P., & Luhmann, N. (2016). Prevalence and risk factors associated with HIV and tuberculosis in people who use drugs in Abidjan, Ivory Coast. *30*, 116–123.
- Brandon, M., Suzan, M. W., Jerel, E., & Danielle, C. O. (2020). “They look at us like junkies”: influences of drug use stigma on the healthcare engagement of people who inject drugs in New York City. *Harm Reduction Journal*, 17:53 <https://doi.org/https://doi.org/10.1186/s12954-020-00399-8>
- Butler, S. (1997). The War on Drugs: Reports from the Irish front. *Economic and Social Review*, Vol. 28, pp. 157-175
- Carvalho, H. B. d., & Seibel, S. D. (2009). Crack cocaine use and its relationship with violence and HIV. *Clinics*, 64(9), 857-866. <https://doi.org/https://dx.doi.org/10.1590/S1807->



59322009000900006

- Castells, X., Casas, M., Vidal, X., Bosch, R., & Roncero, C. e. a. (2007). Efficacy of central nervous system stimulant treatment for cocaine dependence: a systematic review and meta-analysis of randomized controlled clinical trials. *Addiction*, 102, 1871-1887.
- Central Statistics Office. (2011, 16/07/2021 ). Population and Percentage Change 2006 and 2011. Retrieved 20/05 from <https://data.cso.ie/>
- Citizens Information. (2020). Garda Youth Diversion Programme. Retrieved 27/10/2022 from [https://www.citizensinformation.ie/en/justice/children\\_and\\_young\\_offenders/garda\\_juvenile\\_diversion\\_programme.html#startcontent](https://www.citizensinformation.ie/en/justice/children_and_young_offenders/garda_juvenile_diversion_programme.html#startcontent)
- Connolly, J., & Buckley, L. (2016). Demanding money with menace: drug-related intimidation and community violence in Ireland. Citywide Drugs Crisis Campaign.
- Connolly, J., Foran, S., Donovan, A., Carew, A., & Long, J. (2008). Crack cocaine in the Dublin region: an evidence base for a Dublin crack cocaine strategy. Health Research Board.
- Corr, C. (2002). Engaging the hard -to -reach. An evaluation of an outreach service. [https://www.drugsandalcohol.ie/3815/2/2317-2740\\_Engaging\\_the\\_hard\\_to\\_reach.pdf](https://www.drugsandalcohol.ie/3815/2/2317-2740_Engaging_the_hard_to_reach.pdf)
- Darke, S., Kaye, S., & Duflou, J. (2006). Comparative cardiac pathology among deaths due to cocaine toxicity, opioid toxicity and non-drug-related causes. *Addict. (Abingd. Engl.)* 101
- Department of Health. (2017). <ReducingHarmSupportingRecovery. A health-led response to drug and alcohol use in Ireland 2017-2025.
- Department of Health. (2021). Mid term review of National Drugs Strategy,Reducing Harm, Supporting Recovery and Strategic Priorities 2021-2025.
- Diulaitye, R. D., Carlson, R. G., & Siegal, H. A. (2007). Heavy Users,” “Controlled Users,” and “Quitters”: Understanding Patterns of Crack Use Among Women in a Midwestern City. *Substance Use & Misuse*, 42(1), 129–152. <https://doi.org/10.1080/10826080601174678>
- Dutra, L., Stathopoulou, G., Basden, S. L., Leyro, T. M., Powers, M. B., & Otto, M. W. (2008). A meta-analytic review of psychosocial interventions for substance use disorders. *Am J Psychiatry*, 165 (2), 179-187. [https://doi.org/10.1016/S0140-6736\(98\)07612-0](https://doi.org/10.1016/S0140-6736(98)07612-0).
- European Monitoring Centre for Drugs and Drug Addiction. (2007). Cocaine and Crack Cocaine: A Growing Public Health Issue.
- European Monitoring Centre for Drugs and Drug Addiction. (2013). Drug Policy Profiles Ireland. P. O. o. t. E. Union.
- European Monitoring Centre for Drugs and Drug Addiction. (2018). European Drug Report 2018: Trends and Developments
- Fischer, B., Blanken, P., Da Silveira, D., Gallassi, A., Goldner, E. M., Rehm, J., Tyndall, M., & Wood, E. (2015). Effectiveness of secondary prevention and treatment interventions for crack-cocaine abuse: a comprehensive narrative overview of English-language studies.

- . Int J Drug Policy, 26(24):352-363. <https://doi.org/10.1016/j.drugpo.2015.01.002>.
- Fitzgerald, J. L., & Hamilton, M. (1996). The consequences of knowing: ethical and legal liabilities in illicit drug research. . Social Science Medicine, 43(11), 1591- 1600.
  - Frances, G. (2019). Evaluation of Tallaght Local Drug and Alcohol Task Force Crack Cocaine projects. [https://carp.ie/wp-content/uploads/2021/08/v15Evaluation\\_TDATF\\_crack-cocaine\\_projects250119.pdf](https://carp.ie/wp-content/uploads/2021/08/v15Evaluation_TDATF_crack-cocaine_projects250119.pdf)
  - Gossop, M., Marsden, J., & Stewart, D. e. a. (2000). Routes of drug administration and multiple drug misuse: regional variations among clients seeking treatment at programmes throughout England. Addiction, 95, 1197-1206.
  - Gossop, M., Marsden, J., & Stewart, D. e. a. (2002). Changes in use of crack cocaine after drug misuse treatment: 4-5 year follow up results from the National Treatment Outcome Research Study. . Drug and Alcohol Dependence, 66:2, 1-8.
  - Haasen, C., Prinzleve, M., Gossop, M., Gabriele, F., & Miguel, C. (2005). Relationship between cocaine use and mental health problems in a sample of European cocaine powder or crack users. World Psychiatry, 4.
  - Harocopos, A., Dennis, D., Turnbull, P. J., Parsons, J., & Hough, M. (2003). On the rocks: a follow-up study of crack users in London. . National Treatment Agency for Substance Misuse: London.
  - Hay, B., Henderson, C., Maltby, J., & Canales, J. J. (2017). Influence of peer-based needle exchange programs on mental health status in people who inject drugs: a nationwide New Zealand study. Front Psychiatry. <https://doi.org/https://doi.org/10.3389/fpsyt.2016.00211>
  - Hayashi, K., Wood, E., Wiebe, L., Qi, J., & Kerr, T. (2010). An external evaluation of a peer-run outreach-based syringe exchange in Vancouver. Canada. Int J Drug Policy, 21:418–421. <https://doi.org/> <https://doi.org/10.1016/j.drugpo.2010.03.002>.
  - Health Research Board. (2018). Cocaine: The Irish situation
  - Health Research Board. (2019). National Drug-Related Deaths Index 2008 to 2017 data. [www.drugsandalcohol.ie/deaths-data/](http://www.drugsandalcohol.ie/deaths-data/)
  - Health Research Board. (2020). HRB National Drugs Library <https://www.drugsandalcohol.ie/tables/>
  - Howley, D. (2009). Strategic Plan for Limerick City 2009-2013.
  - Iliff, J. J., Alkayed, N. J., Golshani, K. J., Weinstein, J., Traystman, R. J., & West, G. A. (2008). In vivo cerebrovascular effects of cocaine- and amphetamine-regulated transcript (CART) peptide. J. Cardiovasc. Pharmacol. , 52, 82–89.
  - Inciardi, J. A. (2002). Criminal Justice (7, revised ed.). Oxford University Press.
  - Jossens, M. O. R., Eskenazi, B., Schachter, J., & Sweet, R. L. (1996). Risk factors for pelvic inflammatory disease. A case control study. . Sex. Transm. Dis., 23, 239–247.
  - Kelleher, C., Condon, I., & Lyons, S. (2022). National Drug Treatment Reporting System 2015 – 2021. Drug Treatment Data. H. R. Board. [https://www.hrb.ie/fileadmin/2\\_PL-](https://www.hrb.ie/fileadmin/2_PL-)

ugin\_related\_files/Publications/2022\_Publication\_files/NDTRS\_2022/Drug\_Bulletin/Drug\_treatment\_in\_Ireland\_2015\_to\_2021.pdf

- 
- Kelly, T. M., Cornelius, J. R., & Lynch, K. G. (2002). Psychiatric and substance use disorders as risk factors for attempted suicide among adolescents: a case control study. *Suicide Life Threat Behav*, 32(3), 301-312.
- Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *Int J Methods Psychiatr Res.*, 21 (3), 169–184. <https://doi.org/10.1002/mpr.1359>
- Khan, M. R., Berger, A., Hemberg, J., O'Neill, A., Dyer, T. P., & Smyrk, K. (2013). Non-injection and injection drug use and STI/HIV risk in the United States: the degree to which sexual risk behaviors versus sex with an STI-infected partner account for infection transmission among drug users. . *AIDS Behav.* , 17, 1185–1194.
- Knuepfer, M. M., Rowe, K. D., Schwartz, J. A., & Lomax, L. L. (2005). Role of angiotensin II and corticotropin-releasing hormone in hemodynamic responses to cocaine and stress. . *Regul. Pept*, 127, 1–10.
- Lawless, M., & Corr, C. (2005). Drug use among the homeless population in Ireland. D. S. Office.
- Lejuez, C. W., Bornoalova, M. A., Reynolds, E. K., Daughters, S. B., & Curtin, J. J. (2007). Risk factors in the relationship between gender and crack cocaine. *Experimental and clinical psychopharmacology*, 15(2), 165–175. <https://doi.org/doi:10.1037/1064-1297.15.2.165>.
- Liu, Y., Williamson, V., Setlow, B., Cottler, L. B., & Knackstedt, L. A. (2018). The importance of considering polysubstance use: lessons from cocaine research. *Drug Alcohol Depend*, 192:116-128.
- Lynch, T., O'Neill, D., & Lyons, S. (2022). HRB Bulletin. National Drug Treatment System. 2015- 2021 Alcohol Treatment Data. D. Health Research Board.
- Martell, B. A., Mitchell, E., & Poling, J. e. a. (2005). Vaccine pharmacotherapy for the treatment of cocaine dependence. *Biological Psychiatry* 58, 158–164.
- Melhuish, E. (2011). Early years' experience and longer-term child development: Research and implications
- for policymaking. . OECD.
- Midanik, L. T., Tam, T. W., & Weisner, C. (2007). Concurrent and simultaneous drug and alcohol use: results of the 2000 National Alcohol Survey. *Drug Alcohol Depend*, 90:72-80. <https://doi.org/10.1016/j.drugalcdep.2007.02.024>
- Millar, S. R., Mongan, D., O'Dwyer, C., Smyth, B. P., Perry, I. J., & Galvin, B. (2021). Relationships between patterns of cannabis use, abuse and dependence and recent stimulant use: evidence from two national surveys in Ireland. . *PLoS One*, 16(8), e0255745. <https://www.drugsandalcohol.ie/34684/>

- Miller, L. (2017). MA. Substance use education resources. <https://www.projectknow.com/research/substance-use-education-resources/>
- NACD, & DAIRU. (2006). Population Survey on the Prevalence of Drugs - Technical report. [https://www.drugsandalcohol.ie/11588/1/NACD\\_Survey\\_02-03TechnicalReport.pdf](https://www.drugsandalcohol.ie/11588/1/NACD_Survey_02-03TechnicalReport.pdf)
- NACD, & PHIRB. (2011). Drug use in Ireland and Northern Ireland: first results from the 2010/11 Drug Prevalence Survey. . <https://www.drugsandalcohol.ie/16353>
- Nakamura, K., Nakagawa, H., Sakurai, M., Murakami, Y., Irie, F., Fujiyoshi, A., Okamura, T., Miura, K., & Ueshima, H. (2012). Influence of smoking combined with another risk factor on the risk of mortality from coronary heart disease and stroke: pooled analysis of 10 Japanese cohort studies. *Cerebrovasc. Dis.* , 33, 480–491.
- Narvaez, J. C. M., Jansen, K., Pinheiro, R. T., Kapczinski, F., Silva, R. A., & Pechansky F, e. a. (2014). Psychiatric and substance use comorbidities associated with lifetime crack cocaine use in young adults in the general population. *Compr Psychiatry*, 55, 1369 - 1376. <https://doi.org/10.1016/j.comppsy.2014.04.021>
- National Advisory Committee on Drugs. (2003). An Overview of Cocaine Use in Ireland. T. S. Office.
- National Advisory Committee on Drugs and Alcohol. (2007). An Overview of Cocaine Use in Ireland II.
- National Coordinating Committee on Drug Abuse. (1991). Government strategy to prevent drug misuse, .
- National Institute of Neurological Disorders and Stroke-National Institutes of Health. (2012). Final Report of the Stroke Progress Review Group N. I. o. N. D. a. S. (NINDS-NIH). <https://www.ninds.nih.gov/final-report-stroke-progress-review-group-january-2012>
- National Institute on Drug Abuse. (2017). Why Females Are More Sensitive to Cocaine. [gov/news-events/nida-notes/2017/08/why-females-are-more-sensitive-to-cocaine](http://news-events/nida-notes/2017/08/why-females-are-more-sensitive-to-cocaine).
- NTA. (2007). National evaluation of crack cocaine treatment and outcome study NEC-TOS — A multi-centre evaluation of
- dedicated crack treatment services.
- O'Rourke, R. (2022). Agression caused by crack cocaine forces Limerick pharmacists to quit needle exchange programme. *Irish Examiner*. <https://www.irishexaminer.com/news/munster/arid-40856417.html>
- O'Reilly, L., & Cionnaith, C. M. (2019). <Crack-Cocaine-Use-in-Ballymun-an-evidence-base-for-interventions-2019.pdf>.
- Orford, J., Copello, A., Velleman, R. and Templeton, L., (2010). Family members affected by a close relative's, & model., a. T. s.-s.-c.-s. (2010). Family members affected by a close relative's addiction: The stress-strain-coping-support model. . *Drugs: Education, Prevention, and Policy*, 17 (s1), 36-43. <https://researchportal.bath.ac.uk/en/publications/family-members-affected-by-a-close-relatives-addiction-the-stress>

- Pettinati, H., Kampman, K., Lynch, K., Suh, J., Dackis, C., Oslin, D., O'Brien, C., & (2008). Gender differences with high-dose naltrexone in patients with co-occurring cocaine and alcohol dependence. *Journal of substance abuse treatment*, 34, 378-390. <https://doi.org/10.1016/j.jsat.2007.05.011>.
- Pinto, V. M., Tancredi, M.V., Buchalla, C.M., Miranda, A.E., . (2014). History of syphilis in women living with AIDS and associated risk factors in São Paulo. Brazil. *Rev. Assoc. Med. Bras*, 60, 342–348.
- Prangnell, A., Dong, H., Daly, P., Milloy, M. J., Kerr, T., & Hayashi, K. (2017). Declining rates of health problems associated with crack smoking during the expansion of crack pipe distribution in Vancouver, Canada. *BMC Public Health*, 17(1), 163. <https://doi.org/10.1186/s12889-017-4099-9>
- Raleigh, D. (2021). Drug charity providing more crack pipes in Limerick than in Dublin. *Irish Examiner*. <https://www.irishexaminer.com/news/munster/arid-40739217.html>
- Rash, C. J., Burki, M., Montezuma-Rusca, J. M., & Petry, N. M. (2016). A retrospective and prospective analysis of trading sex for drugs or money in women substance abuse treatment patients. *Drug and Alcohol Dependence*, 162, 182-189.
- Ren, H., Du, C., Yuan, Z., Park, K., Volkow, N. D., & Pan, Y. (2012). Cocaine-induced cortical microischemia in the rodent brain: clinical implications. *Mol. Psychiatry* 17, 1017-1025. <https://doi.org/http://dx.doi.org/10.1038/mp.2011.160>.
- 
- Robin, C., & Jordan, K. (2007). *Crack Cocaine The Open Door*. Janus Solutions: London.
- Substance Abuse and Mental Health Services Administration. (2014). 2011–2012 National Survey on Drug Use and Health. National Maps of Prevalence Estimates, by State
- Sussman, S., Miyano, J., Rohrbach, L. A., Dent, C. W., & Sun, P. (2007). Six-month and one-year effects of Project EX-4: A classroom-based smoking prevention and cessation intervention program. *Addictive Behaviors*, 32(12):3005–3014. <https://doi.org/10.3390/ijerph17092997>
- Tunnard, J. (2002). Parental drug misuse – a review of impact and intervention studies.
- Twombly, E. C., & Holtz, K. D. (2008). Teens and the misuse of prescription drugs: Evidence-based recommendations to curb a growing societal problem. *Journal of Primary Prevention*, 29(26):503–516.
- United Nations Office of Drugs and Crime. (2003). Peer to peer. Using peer to peer strategies in drug abuse prevention [https://www.unodc.org/pdf/youthnet/handbook\\_peer\\_english.pdf](https://www.unodc.org/pdf/youthnet/handbook_peer_english.pdf)
- Vayalumkal, J. V., Suh, K. N., Toye, B., Ramotar, K., Saginur, R., & Roth, V. R. (2012). Skin and soft tissue infections caused by methicillin-resistant *Staphylococcus aureus* (MRSA): An affliction of the underclass. *CJEM*, 14, 335–343.
- Young, B. N., Burgos, M., Handal, A. J., Baker, J., Rendon, A., Rosas-Taraco, A., Long, J., & Hunley, K. (2014). Social and clinical predictors of drug-resistant tuberculosis in a public hospital Monterrey, Mexico. *Ann. Epidemiol*, 24, 771–775.









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