Street tablet use in Ireland

A Trendspotter study on use, markets, and harms

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List of abbreviations

BDZs	Benzodiazepines
CEO	Chief Executive Officer
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
HIV	Human Immunodeficiency Virus
HPRA	Health Products Regulatory Authority
HRB	Health Research Board
HSE	Health Service Executive
HIPE	Irish Hospital In-Patient Enquiry
IDO	Intentional Drug Overdose
NDRDI	National Drug-Related Deaths Index
NDTC	National Drug Treatment Centre
NDTRS	National Drug Treatment Reporting System
UCC	University College Cork
WHO	World Health Organization

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This report was prepared by a collaborative group that was established for the purpose of preparing a comprehensive summary on patterns of use, markets, and harms related to street tablets in the Republic of Ireland. This group comprised representatives from the Ana Liffey Drug Project, the School of Public Health at University College Cork (UCC), the Health Research Board (HRB), the University of Limerick, Forensic Science Ireland, the Health Products Regulatory Authority (HPRA), Health Service Executive (HSE) Addiction Services, Merchants Quay Ireland, An Garda Síochána, and addiction/ homelessness specialist general practitioners.

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Summary

The non-medical use of prescription drugs is a global health concern. In the Republic of Ireland, converging signals of the ongoing non-medical use of pharmaceuticals ('street tablets') among clients of community-based, drug harm reduction service agencies in Dublin were noted in 2018. These included significant levels of street tablet use among service clients, an increase in the prevalence of pregabalin in drug-related deaths data since 2015, and reports of online purchasing of tablets for the Irish market. To understand these recent trends, the present study was deemed necessary.

The study adopted the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) Trendspotter methodology and was undertaken between May and September 2019. It commenced with a phase of data collection and a literature review undertaken by a team of staff from the Ana Liffey Drug Project, the Health Research Board (HRB), and the School of Public Health at University College Cork (UCC), culminating in a 1.5-day expert presentation and facilitated groups meeting. The meeting consisted of a group of 11 experts from the Ana Liffey Drug Project, the University of Limerick, Forensic Science Ireland, the Health Products Regulatory Authority (HPRA), Health Service Executive (HSE) Addiction Services, Merchants Quay Ireland, An Garda Síochána, and addiction/homelessness specialist general practitioners.

Experts provided data on use, changing consumption patterns, and availability, with a majority indicating that there has been an increase in the use and availability of street tablets in Ireland between 2016 and 2019. Drugs which are commonly misused in tablet or capsule form include benzodiazepines, Z-drugs, and gabapentinoids. The user groups identified included high-risk opioid users, prison populations, people with complex and multiple needs, and young people. Among these groups, the motivations for using street tablets included their intoxicating effects, to enhance desired effects from illicit substances, to help withdrawal symptoms, to improve sleep, and to reduce stress. Other potential reasons for use are that tablets are cheap to purchase and are easily available.

In terms of the importation of ready tableted products, the main sources appear to originate from the Indian subcontinent. However, as Ireland is not a transit country, identifying the origin of drugs being transported to Ireland can be difficult. Another possible avenue of availability cited was the healthcare system, with overprescribing resulting in the ability for individuals to sell unused tablets on the street. Online sources were also identified as a source of street tablet availability and that, through the internet and social media, distribution of benzodiazepines, Z-drugs, and pregabalin is much easier and wider-reaching. Insofar as routes to markets for tablets in Ireland are concerned, all of these sources are likely to play a part.

Data from the Irish Healthcare Pricing Office demonstrate an increase in the number of non-fatal self-poisoning cases involving benzodiazepines and antiepileptic and sedative-hypnotic drugs between 2015 and 2018. Statistics from the National Drug-Related Deaths Index (NDRDI) also indicate an overall increase in the number of deaths involving alprazolam, zopiclone, and pregabalin. In particular, pregabalin-related deaths have risen year on year between 2012 and 2016, with an increase of 33% between 2015 and 2016 and an overall increase of 364% between 2013 and 2016. Concurrent with an increase in the number of drug-related deaths in Ireland involving benzodiazepines and antiepileptic and sedative-hypnotic drugs, data from the NDRDI also show an increase in the number of poisoning deaths involving a combination of substances between 2004 and 2016.

Experts who took part in this research identified a number of issues which could help to manage the street tablet market. In terms of preventing leakage from the legitimate sources, a robust electronic prescribing system could help better control access, and might help prevent 'doctor shopping'. However, it was also noted that care is needed not to inadvertently divert people to the street market to seek access to tablets. There is also a need to understand and be effective in addressing why individuals are using tablets in the first place, and therefore able to address the reasons why people have to access the tablet market. In this context, supporting medical professionals to better understand and be equipped to address the demand encountered is important, as is the need to get existing public health and harm reduction messaging into novel market spaces, such as the online environment.

1 INTRODUCTION

The non-medical use of prescription drugs has become a global health concern. Non-medical usage is defined as the taking of prescription drugs, whether obtained by prescription or otherwise, except in the manner or for the reasons or time period prescribed, or by a person for whom the drug was not prescribed.[1]

Advances in the pharmaceutical industry have led to the production of powerful psychoactive, antiepileptic, and sedative-hypnotic drugs which, when prescribed appropriately and taken in the manner intended, improve the quality of life of those with specific medical conditions. However, when used inappropriately, these medications may have serious consequences for health.

The non-medical use of pharmaceuticals is a unique category of substance misuse in a number of ways, as the scale of the problem is largely unknown owing to lack of data. This is partly due to the existence of many gaps in the monitoring of their legal use for medical purposes. In addition, most studies on, and monitoring instruments for, substance abuse pertain to the use of illegal drugs or alcohol and tobacco.

In the Republic of Ireland, converging signals of the ongoing non-medical use of prescription drugs ('street tablets') among clients of community-based, drug harm reduction service agencies in Dublin were observed in 2018. Signals included trends and concerns flagged by harm reduction services in the inner-city area. These signals included considerable levels of street tablet use among service clients, an increase in the prevalence of pregabalin in drug-related deaths data in recent years, and reports of online purchasing of tablets for the Irish market. In order to better understand these converging signals, the Ana Liffey Drug Project, the School of Public Health at University College Cork (UCC), and the Health Research Board (HRB), with the support of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), conducted a Trendspotter study to examine patterns of use, markets, and harms related to street tablets in Ireland.

A Trendspotter study is a rapid information assessment that uses multiple social research methods to explore a topic of interest or concern.[2] The approach was developed and has been used by the EMCDDA since 2011 as a tool to complement other routine drug monitoring methodologies. It has generally been utilised to explore emerging phenomena and new trends that are in their infancy and/or not covered by existing datasets.[3,4]

The purpose of the present study was to increase understanding of the use of, and markets for, street tablets in Ireland (specifically Dublin). This included an understanding of users, supply, demand, analysis on active ingredients, risks, and harms.

Specifically, the objectives of this study were to:

- **Better understand the prevalence of street tablet use and the profile of subjects who misuse street tablets in Ireland**
- **Better understand market supply (e.g. internet, trafficking, local production) and availability of street tablets in Ireland**
- **Better understand harms related to street tablet use, both generally and specifically within Ireland**
- **Better understand, through careful analysis, the risks associated with the street tablet market in the Republic of Ireland and inform interventions accordingly.**

2 THE TRENDSPOTTER METHODOLOGY

This research project took place between May and September 2019, and followed the Trendspotter methodology developed by the EMCDDA.[2]

A study of this nature includes the triangulation of information collected through multiple, combined research methods and techniques, with the aim of acquiring a better knowledge of a given social phenomenon in a rapid, reliable, and verifiable way.

Bearing in mind the aims of the study and the research objectives, the following methods were used:

- **Collection of bibliographic and other data**
- **An online survey (questionnaire addressed to national experts)**
- **Presentations at an expert meeting**
- **Focus groups set up at an expert meeting.**

The literature review focused mainly on publications registered in the database for recent scientific research on street tablet use, available from the National Drugs Library (available at: https://www.drugsandalcohol.ie) as well as online publications from organisations such as the EMCDDA, the World Health Organization (WHO), and the United Nations. Articles published in scientific journals between 2014 and 2018 accessible through PubMed and Google Scholar search engines were also consulted. The expressions used were:

- 'benzodiazepines' AND 'use' AND 'Ireland'; 'z-drugs' AND 'use' AND 'Ireland'; 'pregabalin/gabapentinoids' AND 'use' AND 'Ireland'
- 'benzodiazepines' AND 'market' AND 'Ireland'; 'z-drugs' AND 'market' AND 'Ireland'; 'pregabalin/gabapentinoids' AND 'market' AND 'Ireland'
- 'benzodiazepines' AND 'harms' AND 'Ireland'; z-drugs' AND 'harms' AND 'Ireland'; 'pregabalin/gabapentinoids' AND 'harms' AND 'Ireland'.

Also analysed were the databases contained in the Irish Hospital In-Patient Enquiry (HIPE), maintained by the Healthcare Pricing Office at the Health Service Executive (HSE), and the Irish National Drug Treatment Reporting System (NDTRS) and Irish National Drug-Related Deaths Index (NDRDI), which are maintained by the HRB.

The online survey was launched on the LimeSurvey platform between August and September 2019, combining both open and closed questions based on the research topics, namely street tablet availability, prevalence, patterns of use, markets, as well as the motivations and problems related to street tablet consumption. The invitation to participate in the survey, which included an access link to same, was made on the basis of a mailing list consisting of professionals from Irish drug harm reduction services, academics, addiction specialist agencies and general practitioners, Forensic Science Ireland, the Health Products Regulatory Authority (HPRA), An Garda Síochána, and a person with current lived experience of the street tablet market, who, unfortunately, was not able to attend the expert meeting.

The expert meeting was held on 16/17 September 2019 in Dublin and attended by 11 professionals who have direct or indirect contact with the street tablet phenomenon and street tablet users, in areas ranging from chemical, forensic, and criminal investigation, through treatment intervention and harm reduction. Each specialist shared information through an individual presentation and took part in one of two focus groups. The discussion topics focused on five key issues:

(i) street tablet use and availability

(ii) consumption patterns

(iii) markets

(iv) harms

(v) implications for policy and data monitoring.

The triangulation of the information collected through the different methodological tools was used to draw a number of conclusions, which are presented in Chapters 3–7, categorised into different sections.

3 WHAT ARE STREET TABLETS?

‘Street tablets’ is a generic term used to describe drugs that come in either tablet or capsule form. Street tablets can be considered as any tablets or capsules which are not obtained directly by the individual through a doctor or pharmacist.

For this Trendspotter study, 'street tablets' refer to any tablets or capsules which contain (or which the user believes to contain) medicine that is only available on prescription, but which have not been acquired directly from a medical professional.

Therefore, examples of street tablets include:

- Tablets that are legitimately prescribed and acquired by Person A, but which Person B consumes, having acquired them from Person A
- Tablets that are acquired 'on the street'
- Tablets that are ordered over the internet/on the dark web without formal prescribing.

The following were not considered street tablets in this research:

- Ecstasy tablets (not containing medicine)
- Solpadeine (available without prescription)
- Liquid methadone (not in tablet format).

The main categories of drugs that Irish harm reduction services usually receive reports on in relation to street tablets are:

- **Benzodiazepines:** A class of psychoactive drugs prescribed for panic disorder, general anxiety disorder, insomnia, and alcohol withdrawal. Examples of benzodiazepines include diazepam, alprazolam, and flurazepam.
- **Z-drugs:** A class of non-benzodiazepine hypnotics, such as zolpidem, zopiclone, and zaleplon. As with benzodiazepines, Z-drugs are commonly used as a front-line treatment for insomnia.
- **Gabapentinoids (pregabalin/gabapentin):** A class of drugs licensed for the treatment of epilepsy, postherpetic neuralgia, fibromyalgia, neuropathic pain, and general anxiety disorder.

4 USE AND PATTERNS OF USE

Research has illustrated a well-rounded idea of the effects that street tablets have on a wide array of groups, including those in the addiction services population, high-risk opioid users, prison populations, people with complex and multiple needs, and young people. Research on street tablets in the Republic of Ireland is lacking however, specifically regarding use and patterns of use.

4.1 Overview

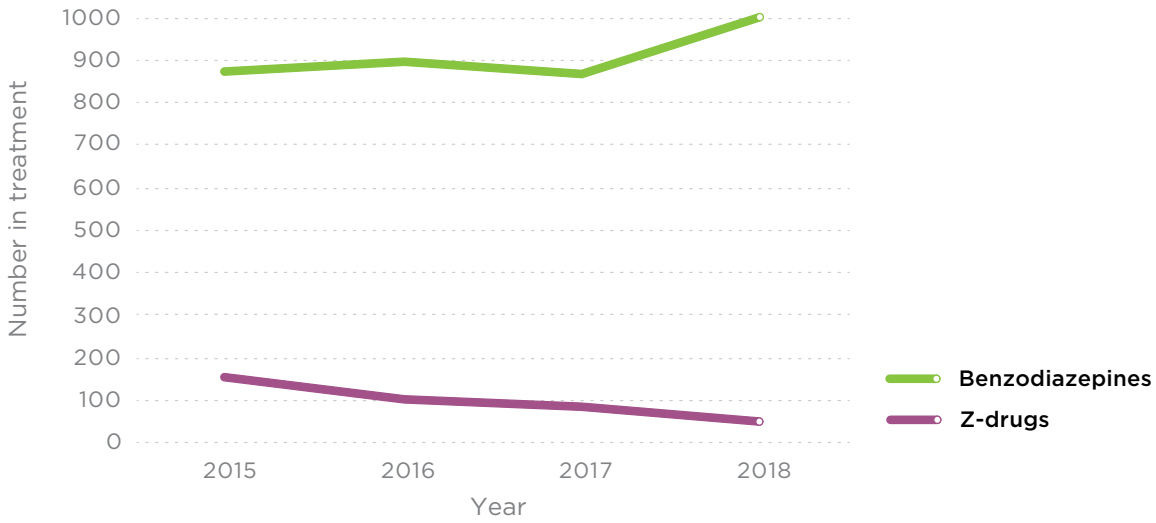
Experts who participated in this Trendspotter study provided data on use, changing consumption patterns, and availability. Interestingly, from the expert survey, seven out of 11 participants believed there to be an increase in the use of street tablets between 2016 and 2019, and six out of 11 held that there had been an increase in the availability of street tablets over the same time period.

4.2 Trends in street tablet use and availability

Data from the National Drug Treatment Reporting System (NDTRS) show that the number of cases entering treatment in Ireland for benzodiazepines as their main problem drug remained relatively stable between 2015 and 2017 **(see Figure 1)**. In 2018, there were 999 individuals in treatment for benzodiazepine use, compared with 868 in 2017. The number of treatment cases who reported Z-drugs as their main problem drug decreased between 2015 and 2018. In 2018, 21 cases reported pregabalin as a main problem; a further 57 cases reported pregabalin as a secondary problem.

However, treatment data may not reflect a complete understanding of street tablet use and availability nationally or internationally. Importantly, a majority of experts who took part in this study agreed that there has been a noticeable increase in the use of street tablets in Ireland in recent years. It was noted, however, that there are differences in the prevalence and availability of tablets being sold. For example, while broad use in general may be the same, the type of tablets actually being sold and ingested are changing (e.g. benzodiazepines to pregabalin), with experts indicating that pregabalin misuse is a serious emerging issue that should be monitored **(see Figure 7, Section 6.2.3)**.[5] In contrast, insights from day services suggested that there has not necessarily been an increase in street tablet use due to the fact that usage has always been high among clients experiencing complex and multiple needs.

In relation to availability, and the fact that there appear to be more street tablets in circulation, there is a question about where the substances are coming from. In general, statistics on street tablet availability are only obtainable from law enforcement figures, providing a focused rather than a broad idea on use and availability. It was noted by experts that, in essence, it can be very easy to acquire tablets abroad and bring back a large stock. Another possible avenue of availability cited was the healthcare system, with overprescribing resulting in the ability for individuals to sell unused tablets on the street. Nevertheless,



Source: NDTRS (2019)

Figure 1: Trends in the number of cases entering treatment for benzodiazepines or Z-drugs as their main problem drug, 2015–2018

some doctors refuse to prescribe benzodiazepine medications at all. Experts suggested that if the healthcare system was standardised in the way it cares for patients and manages patient ailments, street tablet availability might decrease. However, it was also observed that changing the system may initially result in more people purchasing on the street, leading to potential increased harm due to unknown purity and potency. Online sources were also identified as a source of street tablet availability and that, through the internet and social media, distribution of benzodiazepines, Z-drugs, and pregabalin is much easier and wider-reaching. Taking into account this improved technological form of distribution, it is perhaps not surprising that people are using street tablets in higher amounts, resulting in higher demand. In addition, internet distribution methods may lead to a variety of cohorts using tablets.

Feedback from recent research as well as experts in this study highlighted the importance that culture plays in the availability and use of street tablets among communities. On a cultural level, there is an acceptance of the misuse of street tablets as part of normal life and behaviour.[6] Doctors have the legal ability to prescribe these medications on a wide scale, which strengthens the idea that they are safe to use for long periods of time. Data from an Irish study shed light on the use of benzodiazepines among young people and found that misuse of these drugs was normalised and encouraged by their environment.[7] Moreover, the culture among different groups of people who use drugs can have an impact on beginning and sustaining street tablet use. In particular, young people may be influenced by music and pop culture as well as peer pressure. Also, in addition to affecting local cultures, street tablet supply, trade, and distribution have become embedded in local economies, as people are selling, sharing, and swapping street tablets as a form of currency.[6]

4.3 People who use and motivations for use

4.3.1 People who use opioids

High-risk opioid users are characterised by the EMCDDA as people who use opioids weekly or more frequently for at least 6 months of the past 12 months. This includes opioid medicines not used in accordance with medical prescription.[8] In a study of an addiction treatment programme in the United States, Stein *et al*. found that over one-half of the population used benzodiazepines in the month prior to admission, while only one-quarter reported having a medical prescription.[9] They also found that benzodiazepine users tended to have a longer history of opioid use and prior detoxifications; that they used higher doses of opioids; had a higher frequency of injecting, needle sharing, and combined use of alcohol and cocaine; and reported greater criminal activity.

With regard to reasons for using, experts who participated in this Trendspotter study advised that opioid users are taking tablets to deal with withdrawal or to improve sleep and reduce stress. Other potential reasons for use are that tablets are cheap to purchase and are easily available. The heroin drought which was reported across Europe in 2010[10] was also identified as another potential reason for uptake, as many people who use drugs moved off opioids and began using tablets at that time. Ana Liffey Drug Project service users reported that street tablets are mainly used for their intoxicating effects. Service users explained that pregabalin is not only widely available, and easily accessed, but is also taken due to the relished "drunk feeling" that it provides. Consequently, use of this drug may have increased due to its ability to provide users with a "good high" and a lack of barriers because it is an uncontrolled drug in Ireland.

4.3.2 Prison population

Prisoners were another identified group of users of street tablets. Among people entering drug treatment in Irish prisons, most are entering treatment for opioid use, mainly heroin, followed by cocaine, benzodiazepines, and cannabis use. However, of all treatment entrants in prison in 2017, benzodiazepines were the second most common drug reported (13.1%), followed by cocaine (12.3%).[11] A particularly vulnerable group among the prison population is women. The Australian Institute of Criminology found that women in the criminal justice system tend to be more heavily involved with drugs than men and that problematic drug use in women is often linked to victimisation, mental health problems, drug and alcohol abuse among family members, and delinquency.[12]

4.3.3 People with complex and multiple needs

Vulnerable groups of people are often subject to higher rates of drug use, which also comes with greater harms. Experts believe that people are using more recreational drugs in general; however, women have been found to experience a significantly higher rate of street tablet misuse in comparison with their male counterparts, citing the reason for taking tablets as being "to cope".[6] It is also important to note that benzodiazepine users tend to engage in more high-risk behaviours, such as exhibiting a higher frequency of injecting their drugs, sharing needles, and polydrug use.[13] Together, these can lead to unintended health consequences and death among users, specifically those individuals who are already using opioids and mixing drugs.

Of concern, it was identified that there are increasing numbers of refugees engaging with services due to street tablet use, and tablets are being traded at an increased rate among this group. A serious problem associated with this phenomenon is that these individuals are often not reached by local services due to language barriers as well as complications from post-traumatic stress disorder and other mental health illnesses. In addition, homelessness and street tablet usage appear to have increased hand in hand, with subjects in the homeless population reporting using street tablets to "get through the day".

4.3.4 Young people

Experts suggested that the number of young people in Ireland experimenting with street tablets has increased. Dependent young people often engage in street tablet use due to availability and the culture around taking tablets. Furthermore, the college-age population may use street tablets because of their increased popularity and peer pressure among this group. A 2018 study by Murphy *et al*., which examined the experiences of young Irish people in treatment for benzodiazepine misuse,

provides a number of insights into the motivations and consequences around benzodiazepine misuse among young people.[7] The main motivations reported were to self-regulate negative emotions and to dissociate from the environment. A consequence of this misuse was disengagement from family relationships and activities such as school and sports clubs. A common description of the effects of benzodiazepines was a stoned feeling, an intense sense of relaxation, and increased confidence. There was overall agreement that misuse of benzodiazepines was normalised and encouraged by their environment. Subjects also reported accidents, especially in relation to work, due to motor coordination. Other negative effects reported were blacking out and memory loss. Some people mentioned paradoxical effects, such as aggressiveness; in one case, aggression reached a level where a person's mother needed assistance from the police to remove their child from the home.

It is important to keep in mind that, generally, young people are to be viewed along a continuum, with some simply experimenting on one end and vulnerable people exposed to childhood trauma on the other end. It is well documented that adolescence is a particularly vulnerable time for the development of mental illness. Consequently, for young people, misuse of street tablets can have detrimental cognitive effects in the short and long term, which may continue after the person stops using.

4.4 Consumption patterns

Street tablets are most often taken orally, but can also be smoked, injected, or administered rectally, with additional risks.[14] As consumption patterns fluctuate, specifically in relation to the injection of tablets and the link between opioids and tablets, it is believed that the way street tablets are ingested can be related to culture. Specifically, injecting street tablets can be considered a culture/ritual among individuals who already inject other drugs. A study of police detainees in Australia found that one in five people using non-prescribed benzodiazepines had injected them.[12] However, the injecting culture in Ireland appears to be changing. Among individuals currently obtaining treatment for drug use in Ireland, the proportion of all cases that had ever injected decreased from 36% in 2012 to 26.7% in 2018.[15] Overall, experts suggested that injecting street tablets has decreased in most cases, with the exception of when there is a lack of access to other illicit substances and a need to achieve a quicker high.

With regard to consumption patterns, an important issue in relation to street tablet use is the level of polysubstance use observed in Ireland between 2004 and 2016. Feedback from experts suggested that street tablet users will, on average, take four or more drugs at a time, in comparison to the past where they used only one or two. Polydrug use is a well-known risk factor for fatal overdose and accounts for a majority of poisoning deaths; in the Republic of Ireland, approximately two-thirds of all poisoning deaths involve polydrug use, with benzodiazepines being the most common prescribable drug implicated.[16]

5 MARKETS

The most useful source for collated, publicly available data on drug markets in Ireland is the annual report of the Irish National Focal Point to the EMCDDA, in particular the section on drug markets and crime.[17]

5.1 Understanding the street tablet market

The annual report of the Irish National Focal Point to the EMCDDA provides a number of insights which are useful with respect to the street tablet market in Ireland. In terms of mapping the market from source to ultimate user, it is interesting to note that synthetic drugs are not produced in Ireland, nor, in general, are illicit drugs tableted. Ireland is generally viewed as an end source not a transit country.[17]

However, this general point does not fully hold for some key drugs that are the focus of this study, notably benzodiazepines and Z-drugs, as there has been some evidence that Irish organised crime gangs have participated in tableting pharmaceutical drugs. For example, the national report from 2018 records that drugs such as zopiclone, zolpidem, or benzodiazepines have been obtained in powder form and then used to produce tablets using specialised equipment.[17] Tableting machines, when found in Ireland, have tended to be slow and old compared with those found elsewhere in Europe. Legally, the tableting process is not seen as chemical drug synthesis, as tablets and binding agents are only pressed together and not synthesised.[17]

In terms of the importation of ready tableted products, the main sources appear to originate from the Indian subcontinent. As Ireland is not a transit country, identifying the origin of drugs being transported to Ireland can be difficult. Nonetheless, the most recently publicly available data on cross-border crime and threat assessment published by the Police Service of Northern Ireland and An Garda Síochána indicated that the most likely sources of counterfeit medicines were India and Pakistan.[17]

It is interesting to note that in terms of internet purchasing, as far as prescription medications are concerned, there are adequate sources available on the surface web to suggest that purchasers do not have to be sophisticated web users capable of operating on the dark web in order to purchase tablets online. Increasing numbers of people use the internet to search for health information and, consequently, consumers may end up purchasing drugs online – in particular, low-income, vulnerable groups.[18] There are many 'online pharmacies' where medications may be purchased without a prescription. As these sites do not have to be registered in Ireland, or store their stock here, it can be difficult for Irish regulators to assert authority over such enterprises (personal communication: HPRA Enforcement Section, 2019).

Although Irish data on illicit pharmaceutical markets are currently limited, in 2018, the HPRA, in partnership with Revenue's Customs Service and An Garda Síochána, detained almost 90,000 dosage units of illegal prescription medicines, valued at over €375,000, as part of the INTERPOL-coordinated Operation Pangea XI – which targeted the sales of illegal pharmaceuticals.[19] In addition, in line with the approach taken in Operation Pangea, the HPRA, Revenue's Customs Service and An Garda Síochána targeted, on an ongoing basis throughout 2018, illegal online supplies (including through social media) coming into and within Ireland. This action led to the confiscation of nearly 400,000 dosage units of illegally supplied online medicines valued at €1.39 million, including 1,210 dosage units of pregabalin.[20] This ongoing focus in Ireland has also resulted in 14 social media pages and 10 e-commerce advertisements being taken offline. In addition, 56 websites were investigated in order to force them to either close or cease selling medicines in Ireland.

Concerningly, the HPRA noted that the laboratory analysis of products detained demonstrated that illicit medicines often contain too little or too much of the active ingredient. They have also been found to contain harmful or undeclared substances,[19] highlighting the importance of national and international collaboration among enforcement agencies in preventing potentially dangerous pharmaceuticals from reaching the public through illegal markets.

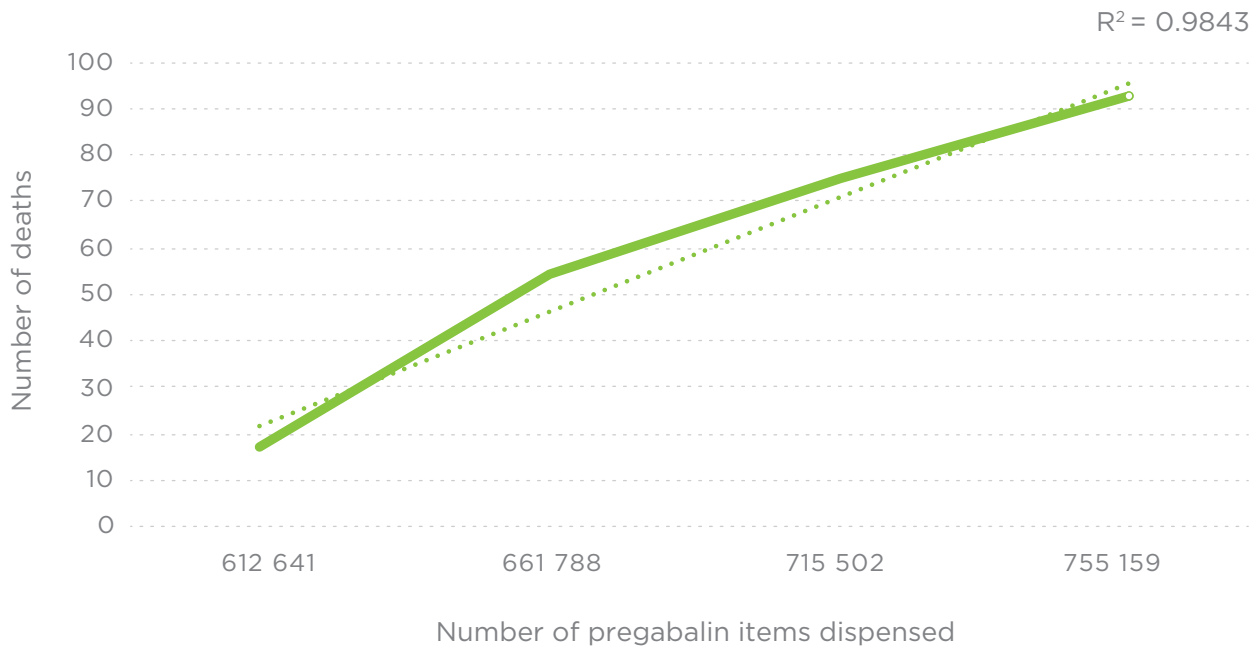
Insofar as routes to markets for tablets in Ireland are concerned, all of these sources are likely to play a part – internal information from Ana Liffey Drug Project staff indicates that clients report tablets currently available on the street market in Dublin city centre as coming from a variety of sources, including being imported without prescription (ordered online), being diverted from a legitimate source, or being "home pressed" tablets (personal communication: Ana Liffey Drug Project, 2019).

Given the diversity of these sources, it is difficult to estimate the size of the street tablet market. Of the reported large seizure data concerning benzodiazepines for 2016, none were recorded as being in Dublin.[17] However, it is important to be aware that statistics in the 2018 report relate to 2016 seizures; since then, media sources have indicated a seizure of 30,000 benzodiazepines (worth an estimated €60,000) at Dublin Port in

late 2017[21] and a further seizure of benzodiazepines worth an estimated €150,000 in Dublin in September 2018.[22] However, as the number of cases is small, it is hard to extrapolate any discernible pattern. It is worth noting that there were reports of benzodiazepines worth €300,000 being discovered by "pure luck" in Dublin in 2015.[23] In addition, as previously mentioned, a majority of experts who took part in this study agreed that there has been an increase in the prevalence of street tablet use since 2016. This is consistent with a market that is growing and not static.

It is challenging to pinpoint precise drivers for this increase. In discussion, experts noted a number of potential reasons from their own experiences. These possible drivers included broad societal issues, such as increased homelessness or an increase in people from social backgrounds not typically associated with the illicit market who are now accessing tablets. It is worth noting that the increase in use was mainly perceived by experts as being an increase in use *generally*, as opposed to being an issue limited to one group of users. In this context, it also appears likely that cost is a driver; tablets are cheap, often only one euro per pill. Similarly, online availability, particularly through the surface web to non-traditional user groups, may also be a factor influencing the size and shape of the market (personal communication: HPRA Enforcement Section, 2019). Finally, as previously discussed, controls and prescribing practices may have an influence as well. Following the introduction of pregabalin in 2004, international evidence has found an increase in its prescription rates[24,25] and a recent ecological study demonstrated that pregabalin-positive poisoning deaths are increasing in line with the increased dispensing of pregabalin in Ireland, with an increase in prescribing strongly correlated with its role in drug-related deaths **(see Figure 2)**.[26]

An interesting consideration in this context is that a large proportion of pregabalin tablets on the illicit market appear to be genuine in nature and thus, to a certain degree, a known quantity, whereas the same is not true for benzodiazepines available, many of which are produced overseas with unknown quality controls.



Source: NDRDI (2019)

Figure 2: Primary Care Reimbursement Service pregabalin dispensing frequency and number of poisoning deaths with a pregabalin-positive toxicology by year, 2013–2016

5.2 Market actors

The changing nature of the drug market in relation to tablets brings some more non-traditional actors into the frame. In terms of more traditional actors, there is certainly a significant element of organised crime involvement. For example, there is evidence that Irish organised crime gangs have participated in tableting pharmaceutical drugs. Beyond tableting, and based on what we understand of the tablet sources, there must also be actors involved in importing pre-pressed tablets and in diverting tablets from legitimate sources. However, there could be different actors engaging at different levels in this market, or the same actors involved in one or more chains. For example, a study in the Mid-West of Ireland noted both local and international supply chains:[27]

> *"More often than not clients were buying these on the city's black market. Due to the high demand for BDZs [benzodiazepines] outstripping local supply, the market was becoming more dependent on foreign suppliers, and purchasing them on the internet was commonplace.*

The same study also observed that tablets were being sold (and used) by people who were also involved in the heroin market:

> *"Often, their supply of benzodiazepines was from the same supplier as their heroin and as such, BDZ usage perpetuating heroin usage was evident.*

Although that study was focused on Limerick, it seems reasonable to assume that similar forces might be at play in Dublin and other areas in Ireland, and that such patterns fit with experts' understanding of the situation in Dublin (personal communication: Ana Liffey Drug Project, 2019). However, in the context of non-traditional actors, the ability to access the market online, particularly on the surface web and without engaging in direct street-level contact, is likely to have made it easier for newer user groups to access tablets. This has been noted in relation to third-level students in the context of "smart drugs",[28] and could also be true in the context of people who seek to replenish supplies of drugs for which they had previously held a legitimate prescription. Such online suppliers arise as a consequence of the increasing use of online marketplaces more generally and, as noted earlier, can be particularly hard to effectively regulate, given that they do not need to be based in Ireland in order to sell into the market.

5.3 The role of street tablets in the market

Consistent with the broadening range of access points and user groups, it appears likely that tablets play a number of roles in the market. In terms of more traditional user groups, there is evidence that tablet use, or at least use of benzodiazepines, is co-occurring with heroin use rather than forming a separate market in itself and/or being a replacement market in times of heroin drought. The study from Limerick[27] also noted that benzodiazepines were being used to enhance the effects of heroin and that subjects were consuming higher than recommended doses:

> *"I am after taking 6–7 sticks [Sticks are a potent form of street Xanax, approximately equivalent to 2 mg Xanax] now [before interview]. I could take 20–30 of them a day. I buy sticks over Xanax because they are stronger. They are sent back from Spain; they are charging a fortune for them. I take Upjohn 90s [1 mg Xanax] as well, maybe 10–15 a day.*

However, the increased online availability of tablets is likely to be engaging different cohorts of people, including those who are self-medicating with tablets at doses closer to recognised therapeutic levels. Experts involved in treatment have noted that some new presentations to their clinics have included patients who fit this profile.

A third possible role for tablets in the market is to ease withdrawal or comedown symptoms for other drugs. A number of experts noted the increase in cocaine purity, and also the presence of both cocaine and tablets in a number of drug-related deaths in recent years, both of which lend some support to this belief. Finally, tablets appear to be both widely and consistently available, and can play a role in satisfying demand when there are shortages of other drugs on the illicit market.

5.4 What substances are being marketed?

In terms of what substances are being marketed in street tablets, feedback from front-line services familiar with the market indicated the mid-2019 availability of the following on the Dublin street market:

- Tranax (alprazolam)
- Zimovane (zopiclone)
- Valium (diazepam)
- Dalmane (flurazepam)
- Lyrica (pregabalin)

Analysis from seizures conducted from 2017 to 2019 indicates that all of these substances have been present, with alprazolam being by far the most frequently encountered substance, accounting for over 50% of detections among the listed drugs in this period. Of note is the detection in testing of substances not included above, in particular etizolam (a thienodiazepine derivative, which is a benzodiazepine analogue) and diclazepam (a functional analogue of diazepam).

6 HARMS ASSOCIATED WITH THE USE OF STREET TABLETS

A number of physical, mental, and social harms are associated with the non-medical use of pharmaceuticals. As previously mentioned, drugs which are commonly misused in tablet or capsule form in Ireland include benzodiazepines, Z-drugs, and gabapentinoids.[14] General harms related to the use of these substances are described in this section.

6.1 General harms

6.1.1 Benzodiazepines

Benzodiazepines are a group of central nervous system depressants which induce feelings of calm, drowsiness, and sleep. While benzodiazepines can relieve stress, anxiety, and tension, they may also induce short-term memory loss. In addition, they may lose their effect after only two weeks of continuous use and may no longer effectively control anxiety after four months of regular use. As subjects can develop tolerance and dependence, long-term use of benzodiazepines is not recommended.[29]

Other harms associated with the use of benzodiazepines[14,30,31] include the following:

- They are dangerous if a user stops taking them suddenly, with symptoms that include anxiety, confusion, and serious convulsions.
- Mixing benzodiazepines with other substances, such as alcohol or heroin, increases the risk of a fatal overdose due to respiratory failure.
- Injecting tablets or capsules may cause septicaemia, abscess, thrombosis, gangrene, loss of limbs, or death. Injecting tablets also increases the risk of contracting HIV and hepatitis C virus if injecting equipment is shared.
- Flunitrazepam (a benzodiazepine) has been linked with 'date rapes' and sexual assaults.

6.1.2 Z-drugs

Z-drugs are a class of non-benzodiazepine hypnotics, such as zolpidem, zopiclone, and zaleplon. As with benzodiazepines, Z-drugs have hypnotic qualities and are commonly used as a front-line treatment for insomnia. Side-effects associated with the use of Z-drugs include impairment in judgement and dexterity, forgetfulness, and confusion. A 2017 study[32] concluded that there is sufficient, converging evidence from epidemiological and experimental studies to establish a strong causal connection between Z-drug use and motor vehicle accidents, falls, and fractures as a consequence of psychomotor impairment. Other paradoxical effects include aggression, disinhibition, and irritability.[14]

Data have suggested that the short-term usage of hypnotics such as Z-drugs has higher risks than long-term usage on a per-dose or per-unit-time basis due to their potential for respiratory suppression.[33] A meta-analysis of available placebo-controlled randomised clinical trials also showed that hypnotics may cause infections ($p < 0.00001$), including increased risk of fatal pneumonia.[34] Z-drugs have also been linked to depression;[35] in combined clinical trials, participants randomised to hypnotics suffered 2.1 times as many incident depressions as those randomised to a placebo ($p < 0.002$).

As with benzodiazepines, tolerance to Z-drugs can develop rapidly and efficacy diminishes with prolonged use. In addition, subjects who take Z-drugs can experience withdrawal symptoms if they stop suddenly. These symptoms range from mild dysphoria and insomnia to 'withdrawal syndrome' – which may include abdominal and muscle cramps, sweating, tremors, and convulsions.

6.1.3 Gabapentinoids

Gabapentinoids (pregabalin/gabapentin) are licensed for the treatment of epilepsy, postherpetic neuralgia, fibromyalgia, neuropathic pain, and general anxiety disorder. Although it is believed that addiction liability for gabapentinoids is low at therapeutic doses, it has been noted that misusers are likely to be individuals with a history of recreational drug use who consume doses three to 20 times the normal medicinal dose.[36]

As with other misused pharmaceuticals, gabapentinoids are usually swallowed, but there are reports of other forms of use, such as crushing and injecting, with concurrent risk, such as vein damage, circulation problems, and transmission of blood-borne viruses.[14] There are also reports of snorting tablets, which may lead to nasal tissue damage and respiratory problems.

Importantly, gabapentinoids may have an adverse effect on the central nervous system when used in combination with other substances, which include even small amounts of alcohol, antidepressants, antiemetics, antiepileptics, antihistamines, antipsychotics, and barbiturates – with a risk of respiratory failure, coma, or death.[30] A University of Helsinki review of pregabalin and gabapentin involvement in opioid overdose deaths reported that pregabalin misuse with high doses is increasingly common and can be fatal when combined with opioids.[37]

6.2 Individual harms in Ireland

This section reports on data from the Republic of Ireland regarding medications involved in non-fatal emergency hospital admissions, intentional drug overdoses (IDOs) involving gabapentinoids, and drug-related deaths involving prescribable drugs.

6.2.1 Non-fatal emergency hospital cases involving medications

HIPE is a computer-based health information system, managed by the Economic and Social Research Institute (ESRI) in association with the Irish Department of Health and the HSE. It collects demographic, medical, and administrative data on all admissions, discharges, and deaths from acute general hospitals in Ireland. Started on a pilot basis in 1969, it was subsequently expanded and developed as a national database of coded discharge summaries from the 1970s onwards. Each HIPE discharge record represents one episode of care; each discharge of a patient, whether from the same or a different hospital, with the same or a different diagnosis, gives rise to a separate HIPE record. The scheme therefore facilitates analysis of hospital activity rather than of disease incidence. HIPE does not record information on individuals who attend emergency departments but are not admitted as inpatients.

Trends over time demonstrate an increase in the number of self-poisoning cases involving benzodiazepines **(see Figure 3)**. In 2018, there were 834 discharges, a 34% increase on 2015, when there were 623 discharges involving this category of drug.

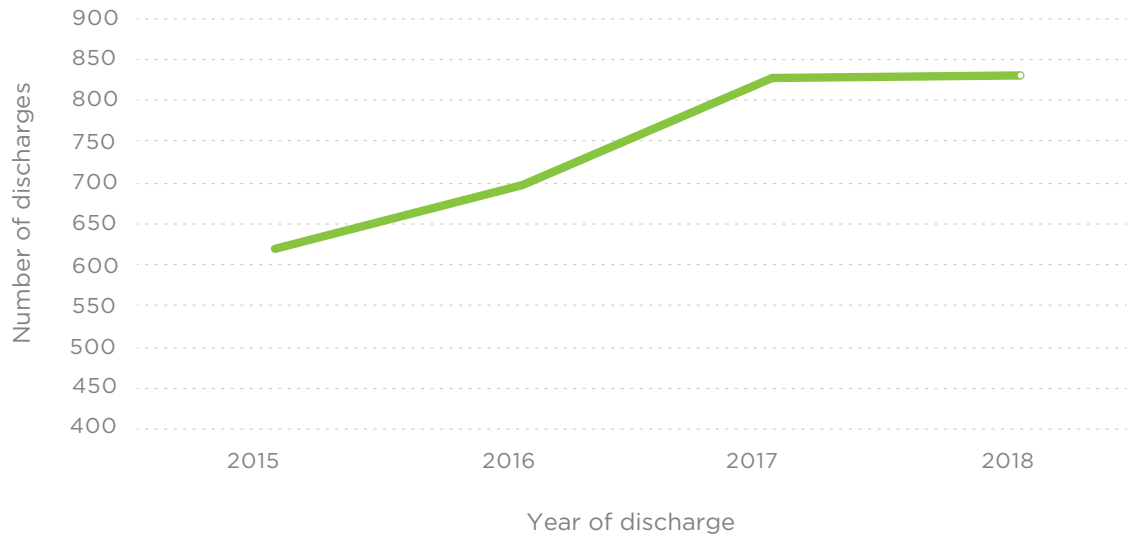
Between 2016 and 2018, there was also an increase in the number of self-poisoning cases involving antiepileptic and sedative-hypnotic drugs **(see Figure 4)**. Although the HIPE data do not allow a breakdown of individual drugs implicated, in 2017 there were 311 discharges involving antiepileptic and sedative-hypnotic substances, a 14% increase on the previous year.

6.2.2 Intentional drug overdoses involving pregabalin or gabapentin

Concerns about the misuse of gabapentinoids, including their consumption in IDOs, have developed in recent years. Gabapentinoid misuse appears to be frequent among illegal drug users[38,39,40] and addiction treatment patients – of which a minority have been prescribed the drug.[5,41] A 2018 Irish study by Daly *et al.*[42] examined trends in the prevalence of gabapentinoids taken in IDOs in Ireland, the profile of individuals taking them, and associated overdose characteristics.

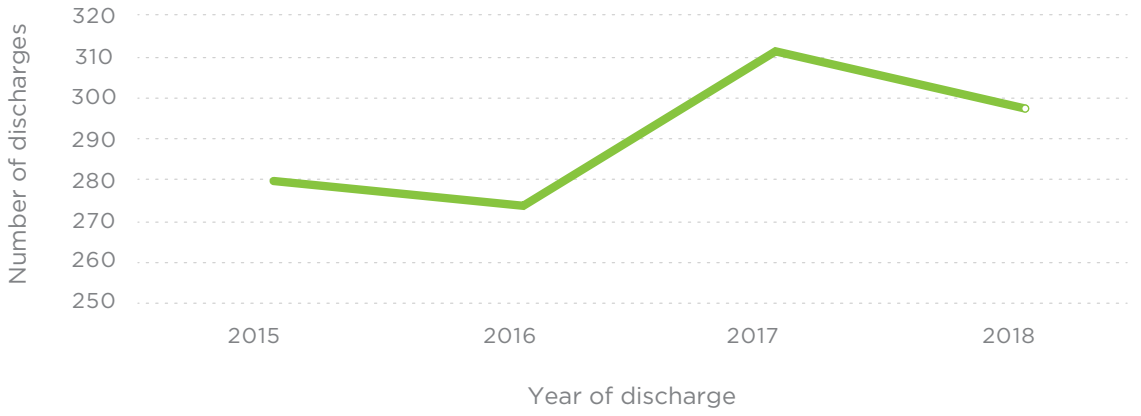
By examining presentations to emergency departments involving an IDO, recorded by National Self-Harm Registry Ireland between 1 January 2007 and 31 December 2015, this research found that

gabapentinoids were involved in 2,115 (2.9%) of the 72,391 IDOs recorded. Presentations involving a gabapentinoid increased proportionally from 0.5% in 2007 to 5.5% in 2015 **(see Figure 5)**. The majority of IDOs involving a gabapentinoid were made by females (59.9%), with over one-third (37.2%) involving alcohol. Compared with IDOs involving other drugs, presentations with a gabapentinoid were made by persons who were older **(see Figure 6)** and involved a significantly greater median quantity of tablets (30 vs 21, $p < 0.001$), with over one-quarter (27.4%) of these involving the ingestion of 50 tablets or more. In addition, it was found that admission to hospital was significantly more common following IDOs with a gabapentinoid compared with those without (49.4% vs 41.4%, $p < 0.001$).



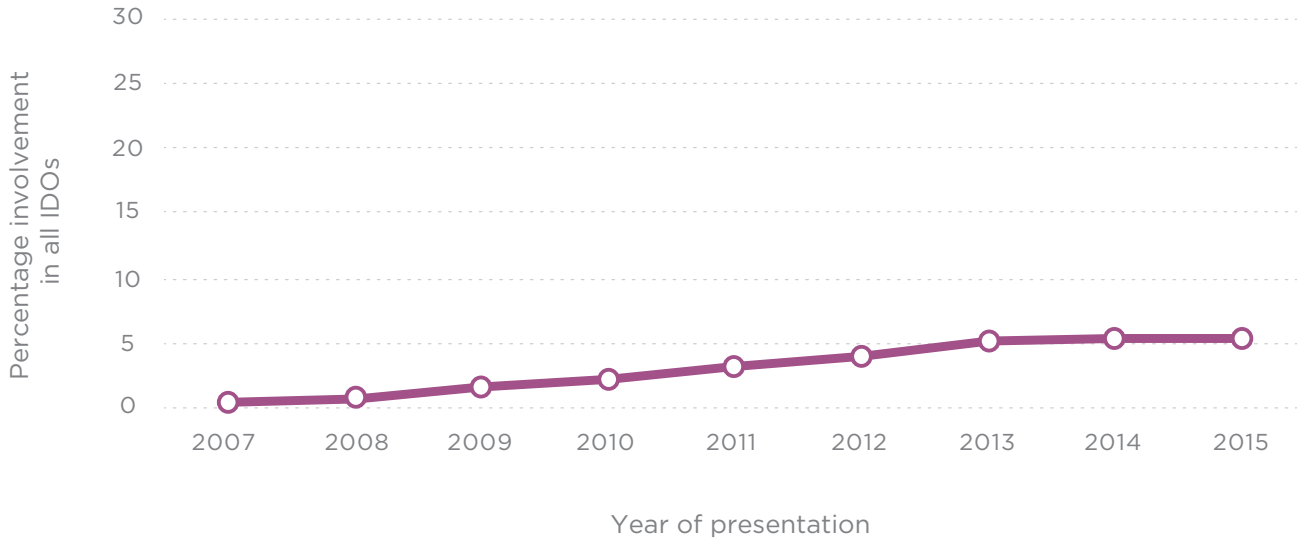
Source: HIPE, Healthcare Pricing Office (2019)

Figure 3: Trends in the number of self-poisoning discharges from Irish hospitals involving benzodiazepines, 2015–2018



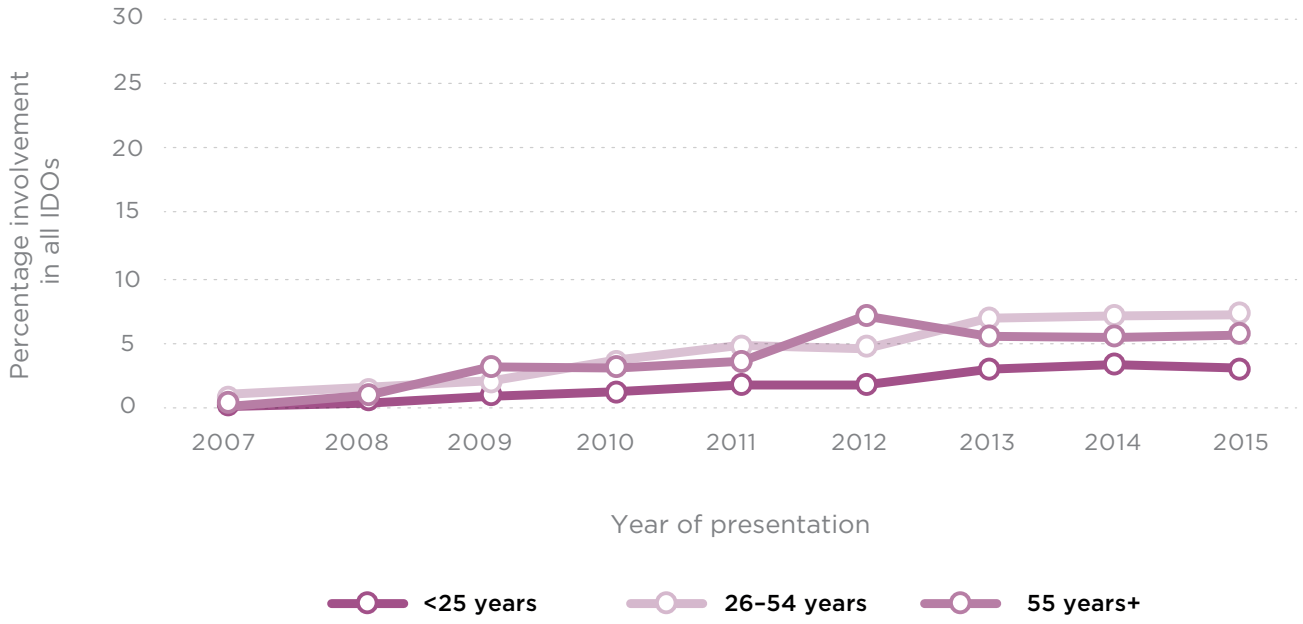
Source: HIPE, Healthcare Pricing Office (2019)

Figure 4: Trends in the number of self-poisoning discharges from Irish hospitals involving antiepileptic and sedative-hypnotic drugs, 2015–2018



Source: Daly *et al.* (2018)

Figure 5: Percentage of intentional drug overdoses involving a gabapentinoid, 2007–2015



Source: Daly *et al.* (2018)

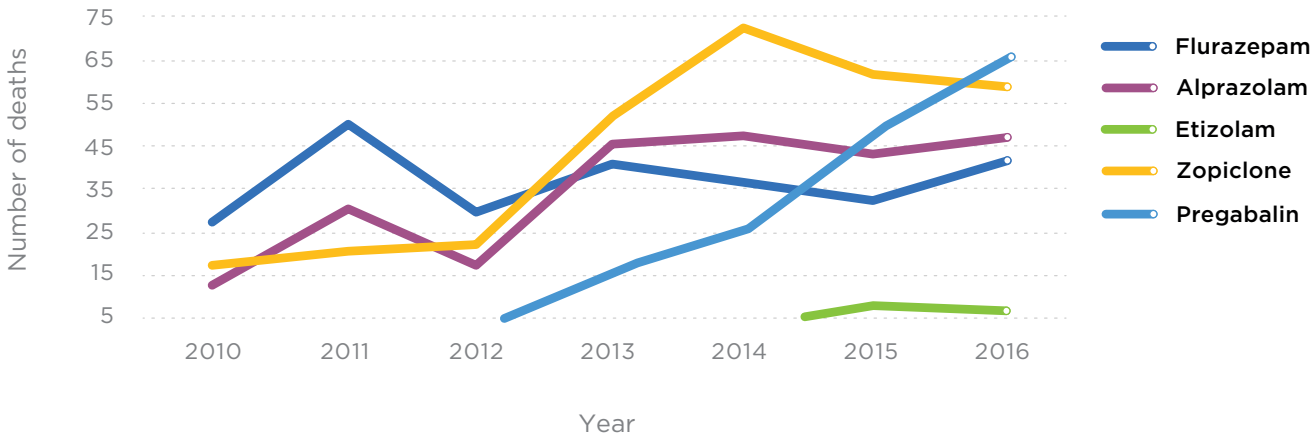
Figure 6: Percentage of intentional drug overdoses involving a gabapentinoid by age group, 2007–2015

6.2.3 Drug-related deaths involving medications

Established in 2005, the National Drug-Related Deaths Index (NDRDI), which is maintained by the HRB, is an epidemiological database of deaths by drug poisoning and deaths among people who use drugs in Ireland, extending back to 1998. The NDRDI also records data on alcohol-related poisoning deaths and deaths among those who are alcohol dependent, extending back to 2004.[16]

Figure 7 shows poisoning deaths in Ireland involving benzodiazepines and antiepileptic and sedative-hypnotic drugs for the years 2010–2016. The results demonstrate an overall increase in the number of deaths involving alprazolam, zopiclone, and pregabalin. In particular, pregabalin-related deaths have risen year on year between 2012 and 2016, with an increase of 33% between 2015 and 2016 and an overall increase of 364% from 14 deaths in 2013 to 65 in 2016. It should be noted that pregabalin has only been included in the routine postmortem toxicology screen by the State Laboratory in Ireland since 2013.

Although opioids were the main drug group implicated in poisoning deaths in Ireland in 2016, prescribable drugs were implicated in 73% (n=258) of all poisoning deaths for this year, with benzodiazepines being the most common prescription drug group implicated. In addition, etizolam – a drug which is not registered as a medicinal product in Ireland, but which may appear in street tablets – was first observed in the NDRDI data in 2014 and was also recently detected in 3.5% of 200 urine samples from patients attending the HSE National Drug Treatment Centre (NDTC) who are monitored on a regular basis for drug and alcohol use.[43]



Source: NDRDI (2019)

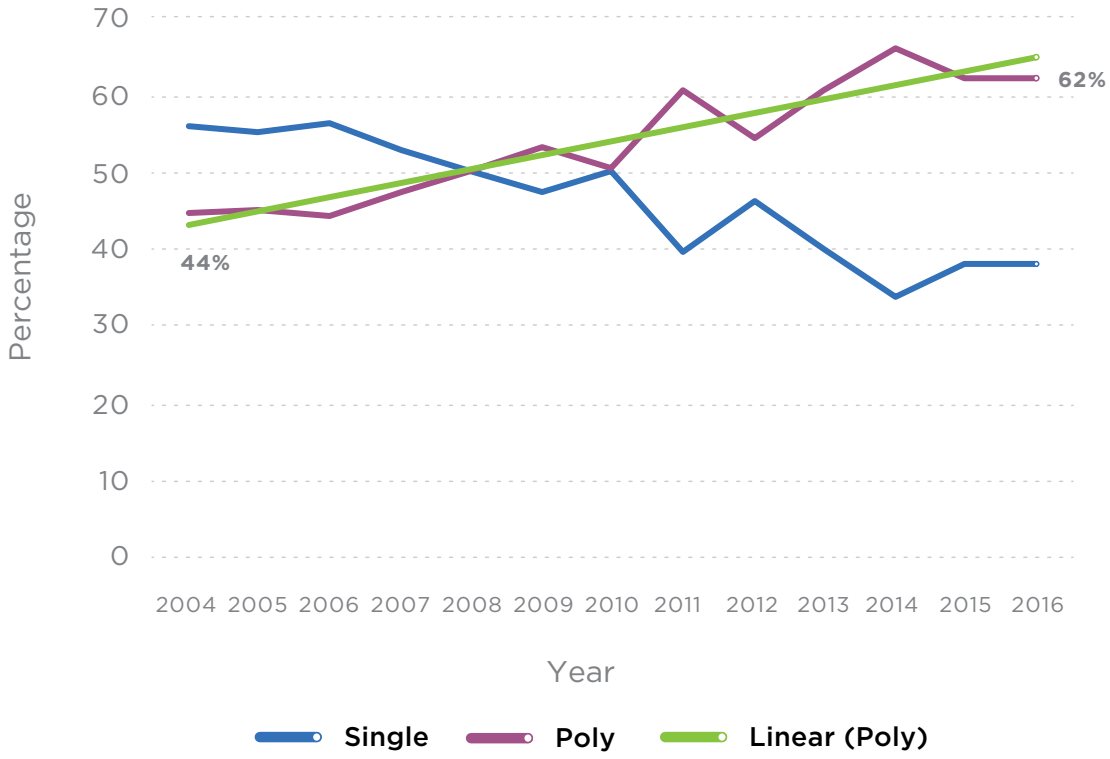
Figure 7: Poisoning deaths in Ireland involving benzodiazepines and antiepileptic and sedative-hypnotic drugs: main specific drugs implicated, 2010–2016

6.3 Harms in the context of polydrug use

Polydrug use is a significant concern among misusers of pharmaceuticals. Experts who took part in this study indicated that polydrug use remains a consistent factor in the harms related to street tablet use and that the combined use of controlled substances and street tablets has contributed to an increase in drug-related deaths. A common reason for combining medications with other substances is to amplify desired effects. For example, using prescription medications with heroin can increase euphoric effects. However, this also increases the risk of harm, as the combination may create breathing difficulties and can reverse tolerance that may have built up against the effects of heroin on breathing.[31,33,44] The literature clearly shows that subjects who misuse opioids appear to misuse benzodiazepines, Z-drugs, and gabapentinoids, in particular pregabalin, to achieve a quicker euphoric high and to reduce withdrawals.[45,46] A 2017 review in the journal *Addiction* also suggests that, in addition to enhancing the effects of heroin, for some people they may be used to help support a reduction in the use of heroin.[39]

In Ireland, the NDTC tested 425 opioid substitution clients for pregabalin in 2014 following requests from health professionals concerned about misuse. In all, there were 498 samples across seven different clinics; 8.8% of samples tested positive, equivalent to 39 of 425 clients (9.2%) testing positive. Only 10 (10/39, 25.6%) clients were known to have been prescribed pregabalin.[5] Mixed misuse with psychotropic agents can also be a problem, as demonstrated in a case report describing the misuse of gabapentin and quetiapine.[47] Research has also shown that gabapentinoids have been used to enhance the effects of alcohol and other prescribed and non-prescribed drugs, including methadone.[39,48,49]

Notably, concurrent with an increase in the number of drug-related deaths in Ireland involving benzodiazepines and antiepileptic and sedative-hypnotic drugs, data from the NDRDI also demonstrate an increase in the number of poisoning deaths involving a combination of substances in recent years **(see Figure 8)**. In 2004, less than one-half of recorded drug-related deaths in Ireland involved polysubstance use, compared with almost two-thirds in 2016.



Source: NDRDI (2019)

Figure 8: Poisoning deaths in Ireland, by single/poly drugs involved, 2004–2016

With regard to polydrug deaths in Ireland in 2016, data show that 81% of deaths where heroin was implicated involved other drugs, mainly benzodiazepines, and that 17% of deaths where heroin was implicated involved pregabalin **(see Table 1)**. Thirty per cent and 45% of deaths where methadone or diazepam were implicated also involved pregabalin.[16]

It is also clear from reports by Irish drug harm reduction services and external studies that individuals who misuse pharmaceuticals are taking (often much) higher than recommended doses and that a vast majority have a history of misuse or dependence on other drugs.[38,45,46,50,51] An Irish case study that examined a 55-year-old patient with a history of multiple psychoactive substance misuse found that the subject consumed a month's supply of pregabalin over two days.[52] In addition, feedback from experts who responded to the online questionnaire suggests that variance in product and purity can lead to significant physical harms occurring to individuals, as dosage cannot be managed because purity is not always the same. Irish harm reduction services described clients sustaining injury, loss of belongings, and committing criminal offences while under the influence of street tablets. Although it was reported that these incidents are not a new phenomenon, it was suggested that observed increases in harms may be due to street tablets with unverified ingredients and unknown effects and the appearance of new types of street tablets implicated (e.g. pregabalin) in addition to a resurgence in the use of alprazolam.

	Alcohol	Methadone	Diazepam	Heroin
Poisoning deaths*	n=132	n=103	n=96	n=72
Alcohol	-	18	24	22
Methadone	18	-	61	19
Diazepam	24	61	-	30
Heroin	22	19	30	-
Pregabalin	9	31	43	12
Zopiclone	15	34	31	13
Alprazolam	12	22	22	14
Flurazepam	9	25	31	8
Cocaine	8	24	23	13
Amitriptyline	~	5	7	~
Citalopram	7	7	7	~
Olanzapine	5	12	15	6
Quetiapine	~	7	8	~
MDMA	0	~	~	~

Source: NDRDI (2019)

Table 1: Combination of drugs implicated in polydrug deaths along with alcohol, methadone, diazepam, and heroin, 2016

* This is a multi-response table taking account of up to six drugs. Therefore, numbers in columns may not add up to totals shown, as individual cases may have more than one drug implicated in their death.

~ Less than five deaths.

7 DISCUSSION, CURRENT RESPONSES, AND RECOMMENDATIONS

By using the Trendspotter methodology developed by the EMCDDA, this study sought to obtain a well-defined and reliable picture of the street tablet phenomenon in Ireland at present, and to complement existing knowledge through an interpretation of this project's findings in the light of a well-delimited bibliographic review and data obtained from expert consultation.

7.1 Discussion

This research demonstrates that there has been an upward tick in the implication of prescribable medications in drug-related harms in the Republic of Ireland. Figures show an increase in the number of non-fatal self-poisoning cases involving benzodiazepines and antiepileptic and sedative-hypnotic drugs between 2015 and 2018. Data also indicate an overall increase in the number of deaths involving alprazolam, zopiclone, and pregabalin between 2010 and 2016. Concurrent with an increase in the number of drug-related non-fatal self-poisoning cases and drug-related deaths in Ireland involving benzodiazepines and antiepileptic and sedative-hypnotic drugs, statistics also show an increase in the number of poisoning deaths involving a combination of substances between 2004 and 2016. Although these data do not demonstrate whether medications involved in drug-related harms in Ireland are legitimately prescribed, and although trends do not suggest a large increase in the number of clients entering treatment for prescribable medication misuse, these findings are coexisting with an increase in street tablet availability suggested by experts involved in this research.

Despite the dangers posed by street tablet use, particularly in the context of polysubstance use, there continues to be a strong demand for tablets; agencies and medical professionals in Ireland working with people who use drugs reported an increase in the use of street tablets between 2016 and 2019. Street tablet misuse is popular, generally among people who use drugs and who may already be engaged with services (in particular opioid users), but also to a lesser extent among other cohorts. These include prison populations, people with complex and multiple needs, and young people. Street tablets are attractive to people for a wide range of reasons – from dealing with the effects of coming down from other drugs or alleviating withdrawals, to potentiating effects, and to reduce stress.

With regard to street tablet markets, there is evidence of both organised crime involvement and diversion from legitimate sources. Although there has been a street tablet market in Ireland for many years, the nature of the market is changing; tablets are easy to obtain and there is perhaps a broader range of cohorts using street tablets than was previously the case. There are also changes in composition, as is shown with the emergence of drugs such as pregabalin and etizolam in the Irish statistics. It may be the case that we are, to a certain degree, looking at a change in the drugs that are now being sold in street tablet form, as opposed to a change in the tableted form itself.

There are a number of potential drivers of change in the street tablet market. First, tableted products are easily available online, both through surface and dark web sources. Thus, it is no longer necessary to have physical contact with market actors in order to access drugs. The retail market has been greatly changed by online activity in recent years and there is no reason to assume that illicit markets would not also adapt to this new selling mechanism. Second, this ready availability may also be impacted by the fact that the drugs in street tablets are those that are legitimately prescribed to many people, and are therefore viewed through a different lens than more stereotypical street drugs such as cannabis or crack cocaine. Knowing that medications have a therapeutic function may be a factor in people seeking them out online if, for example, they had previously held a prescription which expired. This factor distinguishes the tablet market from other illicit drug markets where such drugs are not prescribed (or prescribable) to individuals in Ireland. Third, changes in the composition of tablets could be driven by diverse factors. For example, the emergence of etizolam in recent years may be as a result of it becoming a favoured product to use in tableting operations in other jurisdictions. Alternatively, it may indicate that those involved in the street tablet market in Ireland are reacting to changes in the legal framework to tighten controls. As a consequence, they are favouring pregabalin/etizolam over benzodiazepines, which were added to the schedule in 2017, thereby tightening controls. Fourth, as previously discussed, the substances found in street tablets have a range of uses which make them attractive to people. For example, they can be used to potentiate the effects from other drugs and can be used to ease the symptoms of 'coming down'. In addition, they have a broad range of therapeutic uses.

This landscape presents a number of challenges for policy-makers and practitioners seeking to reduce harms resulting from the street tablet market. For instance, attempts to prevent or restrict access to the market may be difficult given the fact that there is clearly a significant demand for tablets. This is coupled with changes in the retail landscape and, as a result, there are many supply routes that are easily accessible. This brings challenges for detection and enforcement; small quantities of

tablets are difficult to detect, particularly in a retail market characterised by individual-level purchasing. Equally, the entities carrying out online sales can be outside Irish jurisdiction, and thus beyond the reach of regulatory authorities.

There are corresponding challenges in the harm reduction and treatment fields. Available information about street tablets for people who use drugs is often generic and less specific than would ideally be the case. Similarly, physicians working with people using street tablets have an imperfect knowledge of what their patients are using, presenting a challenge in managing clinical risk. There are also difficulties in the context of data and monitoring. For example, Ireland has a very robust drug-related deaths reporting system. However, reports are only available at a significant remove from the time period to which they relate. On the prescribing side, there is currently no centralised electronic prescription monitoring system in Ireland which could allow physicians to view all prescriptions issued to a patient under their care. Finally, there are challenges for policy-makers in the context of considering the impact of policy choices. For example, the primary driver behind controlling benzodiazepines in 2017 was to protect public health by bringing certain substances which are open to misuse, and known to be traded on the illicit market, under the scope of the Misuse of Drugs legislation, thereby aiding the law enforcement activities of An Garda Síochána.[53]

It should be noted, however, that interventions in drug markets are not neutral and may have consequences, not all of which are intended. Taking drugs, money, and people out of the market at the street level is an example; while it may have a short-term impact on the market, such interventions may not impact the size or scope of the market in a significant way. These interventions can also have unintended consequences, as the debt owed for money or drugs seized at street level is unlikely to be written off, and can lead to significant social and community safety issues as market actors seek to recover drug debts. This results in a complex and challenging policy field for policy-makers who are faced with a domain in which there are no simple solutions, and in which interventions in one area can have unintended repercussions in another.

7.2 Current responses

Consistent with drug policies internationally, Ireland's national drugs strategy – *Reducing Harm, Supporting Recovery* – incorporates both demand reduction and supply reduction components.[54] Goal 3 of the strategy is designed to address the harms of drug markets and reduce access to drugs for harmful use. This goal has three objectives based on legal framework, law enforcement, and monitoring.

There are a number of performance indicators for these objectives, including:

- The participation of relevant sectors and experts in the Early Warning and Emerging Trends Subcommittee (Department of Health)
- Timely and coherent response to adverse incidents (HSE figures)
- The volume of drugs seized that are considered to be intended for the Irish market (An Garda Síochána/Revenue Customs data)
- The number of prosecutions for importation, manufacture, and distribution of illicit drugs (Recorded Crime Offences), and
- The number of supply detection cases (Recorded Crime Offences).

In achieving these aims, there is significant activity and cooperation both between relevant agencies domestically and with international networks and bodies on supply control. Within Ireland, the principal agencies involved in supply reduction activities are An Garda Síochána, Revenue Customs, the HPRA, and the Naval Service. Irish agencies are also engaged with the international community through bodies such as INTERPOL, Europol, and the Maritime Analysis and Operations Centre.

On the demand reduction side of the equation, goals 1 and 2 of the national drugs strategy are centred on protecting health and well-being, harm reduction, and the promotion of rehabilitation and recovery. Goal 1 has three objectives focused on promoting healthy lifestyles, preventing early use, and harm reduction for specific groups. It mandates a range of activities directed at achieving these objectives, while performance indicators include measures such as the reduction in the use of illegal drugs in the last year. Goal 2 has two objectives based on better health and social outcomes for people who use drugs generally and a focus on high-risk groups specifically. Again, there are a range of performance indicators. However, performance indicators for the strategy tend not to be substance-specific, and so apply to all illicit drugs, not any class of drug specifically. One notable exception is a focus on reducing drug-related deaths where opiates are implicated.

Insofar as data on market responses involving tablets are concerned, there have been a number of large seizures in recent years, as was noted earlier. However, the extent to which this has affected the street tablet market beyond local and short-term disruption is unclear, particularly given the wide and consistent availability of tablets in Ireland. Also, as previously observed, it is important to be aware that the market is supplied to a degree in a diffuse, small-scale way, involving individual purchasers in the online environment buying from actors outside the traditional physical street market setting – a supply route which poses significant difficulties for detection and enforcement activities. There have also been legislative interventions, such as the introduction of enhanced controls on benzodiazepines and Z-drugs.

On the demand side, most information relates to benzodiazepines, which is unsurprising given their primacy in the market. Since 2013, benzodiazepines have accounted for around 10% of all treatment cases, and a similar proportion of new cases, and are the fourth most common drug presenting at treatment, as well as the second most common secondary drug (behind alcohol).[55] There are community detoxification guidelines for benzodiazepines available, but nothing formal in relation to zopiclone or pregabalin.

7.3 Recommendations

Through the discussion, experts who took part in this research identified a number of issues which could help with managing the market. In terms of preventing leakage from the legitimate market, a robust electronic prescribing system could help to better control access and could help to prevent 'doctor shopping'. However, it was also remarked that care is needed not to inadvertently divert people to the street market to seek access to tablets. Thus, to be effective in reducing harms

from tablet use, there is a need to understand and be effective in addressing why individuals are using tablets in the first place, and therefore able to address the reasons why people have to access the tablet market. In this context, supporting medical professionals to better understand and be equipped to address the demand encountered is important, as is the need to get existing public health and harm reduction messaging into novel market spaces, such as the online environment.

More generally, it is important that any market interventions are assessed and understood in the broader context of the health-led approach of national policy. The reality is that drug markets are not going away – policy-makers can intervene in strategic ways but cannot control illicit markets. In considering interventions, it is important to think systemically, rather than focusing on one discrete area in isolation. For example, enforcement activities directed solely at individual consumers can have unintended harms in terms of legal pressures, development of drug-related debt for street-level users, and unintended impacts on family and relationships as satisfaction is sought for those debts.

With the foregoing in mind, and in recognition that interventions can have unintended consequences, the group recommends that policy-makers interested in intervening in the street tablet market consider the following in designing interventions:

1. Metrics should be meaningful:

Measuring success is difficult, but there is a need to identify metrics which indicate that goals are being achieved. Absolute metrics (such as seizures or numbers of people in treatment) are useful as data points, but they do not necessarily indicate that interventions are working. Seizures do not speak to the size of the overall market, nor of whether those seizures disrupt the market to any significant extent. Treatment numbers tell us little about the barriers to entry to treatment or about how those in treatment fare.

2. One size does not fit all:

Different groups require different interventions. The policy response that is required to successfully address the issue of people buying online and self-medicating at therapeutic levels is likely to be different to that required to address the issue of people who are using tablets at levels that are far above therapeutic levels, perhaps as a method of coping with previous trauma and co-occurring social and health issues. Broad interventions, such as scheduling drugs to tighten controls or limiting the discretion of appropriate medical experts to prescribe tablets at non-therapeutic doses, may have unintended consequences that result in new drugs appearing on the illicit market, or driving people to access that market in the first place.

3. Consider market satisfaction as a means of market control:

Drug policies, Ireland's included, typically recognise the drugs issue as largely being market based, and they focus on seeking to reduce the size of this market by controlling either market supply (through interdiction) or market demand (through education and treatment). An alternative market intervention is to meet aspects of supply and demand as a means of satisfying aspects of the illicit market. The concept of satisfying an aspect of the market can be useful as it may free policy-makers to think about interventions in a different way; i.e., the focus may not be on reducing supply and demand, but may be on having more control over those aspects of the market which are causing most harm. For example, if there is a cohort of people who are using significant quantities of prescribable medications, and are also accessing addiction services, there is an argument for providing these subjects with prescribed tablets of a known purity in order that they do not access the street tablet market.

4. Data monitoring and sharing:

Timely data are important for both informing policy choices and evaluating them. Drug use and drug markets are not temporary phenomena; they are part of our modern world, and will continue to be so into the future. Policy-makers planning interventions in this area should do so with this in mind, and seek to build robust data systems which facilitate a coordinated and timely response to the harms caused by the street tablet market. In particular, agencies and professionals working in the field should have access to timely, shared data, which are tangibly connected to understanding the impact of policy choices.

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