

The Use of Prescription Medication in Prisons in Northern Ireland

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THE USE OF PRESCRIPTION MEDICATION IN PRISONS IN NORTHERN IRELAND

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The use of prescription medication in prisons in Northern Ireland

Introduction

Substance use is common among those incarcerated in prisons across Europe and globally, with levels of use disproportionately high compared with the general population (Boys et al 2002; EMCDDA, 2018; 2012). Drugs have for many decades been illegally used and legally prescribed within prisons, profits have been generated from selling drugs, and substance use has remained high on the public health agenda within prisons (Kolind and Duke 2016). More prisoners are using a wide range of substances and prison life is, as a consequence, often characterised by drug-related issues (Boys et al 2002, EMCDDA, 2018; Kolind and Duke 2016). Research has consistently evidenced the high risk nature of the prison environment for drug initiation/relapse/ unsafe forms of drug taking behaviour, transmission of HIV and other blood-borne infection (ECMDDA 2012; Strang et al. 2006). Drug using prisoners have generally experienced multiple deprivation, low educational achievement, unemployment and many have experienced periods of homelessness (DoH, 2018a; EMCDDA 2012). Poor physical and mental health are also common, including dual diagnosis of substance use related disorders, with significant psychiatric conditions including post-traumatic stress disorders (PTSD), anxiety, depression and psychosis. Risk of suicide remains high among prisoners who use substances (ECMDDA, 2012; WHO, 2007).

Substance use must also be understood through the lens of the everyday social life within prison: the prisoner culture, social networks and economics (see Wheatley, 2007). Drug use and the market systems within prisons can place further emphasis on existing inequalities in these environments for example, between powerful and more vulnerable prisoners. Substances of all types in the prison system are a profitable commodity (both economically and or in terms of symbolic capital). Therefore, they have potential to exert a powerful influence on the everyday prison environment (Kolind and Duke, 2016).

Rationale for the study

The use of prescription medication has been highlighted as a particular area of concern within prisons in Northern Ireland (CJINI, 2016). This assertion is in tune with concerns about the high levels of use within the wider community in Northern Ireland, as evidenced in regional statistical data (DoH, 2018a). The research team recently completed work throughout the prison estates in Northern Ireland as part of a large study funded by the National Institute of Health Research (Higgins et al. 2018), examining

the use of new psychoactive substances (NPS). Interviews with prisoners and Personal and Public Involvement (PPI) and work with prison staff highlighted the need to focus further on prescription medication as a key issue and a contemporary challenge of working in the prison environment. The team were funded by the Health and Social Care Public Health Agency to conduct a scoping study within the prison estate to further examine the role played by prescription medication within that context.

Aims and objectives

The primary aim of the current research was to examine the use of prescription medication in prisons across Northern Ireland from the perspectives of prisoners, prison officers and healthcare staff. We did not seek to examine the prescribing of these substances, rather the use of drugs that are commonly prescribed and consumption of these drugs with and/or without prescription. It also aimed to examine how prescription drug use fits into the wider portfolio of drug use in prisons.

Principal research questions:

- Are prescription drugs (PDs) more or less available than illicit drugs and/or NPS?
- Are they used singularly or in tandem with other drugs?
- Is use always based on availability?
- What might help in terms of diversion?

However, while the study did not set out to examine the prescribing of substances, the issue of prescribing practices emerged frequently during discussions with all participants and because of this, represented an integral part of the analysis and subsequent findings.

Report structure

The report is divided into five sections. **Section One** provides details on the study design, research methods and analytical approach. The study uses a qualitative method, drawing on the voices and experiences of prisoners, prison officers and healthcare staff to examine the issue from a broad perspective. **Section Two** sets out the background to the study, briefly charting the changing pattern of drug use, the rise in the misuse of PDs and situates the research in a Northern Ireland context, where the study took place. Reporting of results are presented across two sections: **Section Three** examines patterns of use as reported by participants, revealing broad agreement on current trends. It also looks at availability of PDs in prison, summarising what participants perceived to be the main drivers of increased availability. **Section Four** looks at the issue of risk management from the

perspective of prisoners, prison staff and healthcare staff. The concept of 'risk' was used here to get a better understanding of motivation; the things that prompt people to make certain decisions and the basis upon which decisions are made. **Section Five** concludes with a summary and discussion of the main points, including recommendations for consideration.

SECTION ONE - RESEARCH DESIGN

Methodology

The study design encompassed the use of focus group interviews with prisoners, with prison staff and with healthcare staff. Focus groups are commonly used to gather opinions about a defined topic. Participants are purposively selected because they have certain things in common that relate to the topic of interest (Krueger and Casey, 2009). They are designed to encourage open discussion and sharing of views in a relaxed environment. Focus groups are not used to gather personal information of a sensitive nature.

Initially, it was proposed that we would conduct one-to-one interviews with healthcare staff, as opposed to focus groups, because of the limited number of healthcare staff in each prison. However, it was difficult to set-up appointment dates and times that suited individual healthcare staff, within the time schedule of the study. Therefore, rather than miss an opportunity to speak with willing participants, we adopted a pragmatic approach and agreed on one date and time that suited everyone.

Focus group interviews with prisoners were conducted prior to focus groups with prison staff and healthcare staff. Data collected from prisoners informed the basis of broad key areas that were investigated and corroborated/or not through subsequent data collection with staff.

As a result of heavy work demands, the number of prison staff and healthcare staff that eventually participated in the focus group in prison B was small (three and two respectively). However, the diversity of the constituencies across the three different groups ensures that the sample remains rich in terms of representativeness, allowing us to explore the influence of different factors (Lewis, 2003: 85).

Sample

The sample included prisoners and staff with varying roles working within the prison (see Table One for participant characteristics).

Table 1: Focus group participant characteristics

FOCUS GROUP	PRISON A	PRISON B
Prisoners	Nine people participated. The group	Seven people participated. Their ages
	met regularly to lead their own	ranged from approximately 21 years to
	discussion group on issues related	mid-50's. All participants were either
	to substance use and general	present or past users of the AD:EPT
	wellbeing. All participants were	service.
	either present or past users of the	
	AD:EPT service.	
Prison staff	Seven people participated in the	Three participants took part. This
	group discussion. The majority	included Prison Officers with various
	included Prison Officers. A small	levels of seniority.
	number of ancillary staff attended.	
Healthcare staff	Five people participated. The group	Two people took part. Both participants
	included G.P., Clinical Director,	had responsibility for primary care
	Mental health nurse, Nurse	prescribing.
	Manager and Psychologist.	

Sample total = 33

Research ethics

The study was submitted for ethical approval to Business Services Organisation, Office for Research Ethics Committees Northern Ireland (ORECNI) on 12th March 2017. Ethical approval was confirmed on 8th June 2017.

The primary ethical issues in this study centre round recruitment, informed consent, data collection and storage and the possibility of unintended harms.

Recruitment

We were aided in recruitment of prisoner participants by the local drug and alcohol support service – Alcohol & Drugs: Empowering People through Therapy (AD:EPT)¹, which operates throughout all locations. They also assisted in access arrangements for carrying out the focus groups. AD:EPT staff asked individuals engaged with the service if they were willing to take part in a focus group to discuss their perceptions of prescription drug use in prison.

Whilst conducting other ongoing work, the team had also availed of the opportunity to discuss this prescription drug use study with prison staff and healthcare workers. They all valued the opportunity to have the issue researched and they agreed principle in advance (Governor, senior officers and officers and healthcare staff for participation in the focus groups). In order to minimise burden to prison staff and upon the advice of senior officers, focus groups were held after the weekly prison meeting for senior officers and staff. Discussions with healthcare staff took place at a time and location which was convenient for the majority of participants.

Informed consent

Informed consent was sought at the beginning of each focus group. Participant information sheets were passed to those interested in taking part in the study (via the AD:EPT team) one week prior to data collection. Participants were asked to read this prior to completing the interview. In the event that participants are unable to read, a member from the AD:EPT team read the information to the participant. Prior to the commencement of the focus group, participants were asked to sign and date a consent form to indicate that they understood all the information given.

Participants were free to withdraw from the study at any point and were made fully aware of this at all stages throughout the research. The process of informed consent was a continuous one and until the point of data analysis, participants were able to withdraw from the study. Participants were informed of this right in the information sheet and reminded prior to participating in the focus group at consent stage.

^{1 1} AD:EPT is a service organised by Start360, providing a range of services to people in custody who have problems with drug and alcohol use. See http://www.start360.org/

Data collection and storage

In accordance with Standard Operating Procedure for Management of Data, participants were provided with detailed information sheets informing them of the purpose of the study, risks and benefits, and the ways in which data will be used.

All data was held securely on password protected computers within QUB to protect against unauthorised access. All personal identifiers were removed from transcripts prior to analysis to ensure that participants cannot be identified.

Confidentiality and Disclosure

The nature of drug related research will elicit the divulgence of information on behaviour that is deemed criminal. Prior to participation respondents were assured that researchers will, to the best of their ability, keep all information confidential. Participants were not asked to discuss personal experience and were encouraged not to share specific and identifiable details of criminal behaviour inside or outside the prison. If participants had disclosed information leading us to believe that they or someone else is at risk of harm, we had planned to follow Supporting Prisoners at Risk (SPAR) protocol and inform AD:EPT staff and relevant prison staff. No such disclosures arose over the course of data collection.

Participants were advised of all disclosure protocols in the participation information sheet and again prior to commencement of the focus group interview. Prison staff were also made aware of conditional confidentiality and informed that the team will endeavour to keep all data confidential unless they divulge information that leads us to believe that they or anyone else is at risk of harm.

Wellbeing of participants

Due to the sensitive nature of the research, there was a risk of distress on behalf of participants. In the event that an individual becomes distressed during the interview, we had developed protocols which involved the Principal Investigator (PI) being informed, with that information then being passed onto the AD:EPT team and other relevant persons if required. The team has extensive experience in conducting research with vulnerable populations and in the area of substance use. Again, nothing arose requiring such action over the course of fieldwork

Researcher Safety

The research team attended civilian training for working in the prison estate and had experience of conducting research in this setting through ongoing work. Focus groups took place in the Prisoner

Development Unit of the prison with a prison officer located outside of the room. Two researchers were present at each focus group.

Incentivisation

Prisoners participating in the focus group were compensated for their time with £5 phone call credit, in line with remuneration for our ongoing work in the prisons.

Data analysis

Interview data were transcribed verbatim and anonymised through the removal of potential identifiers. Transcripts were uploaded to NVivo for thematic analysis by two members of the research team. Cross-checking of themes took place within the wider team. Data coding was accomplished in two stages. The first step *initial coding* involved the generation of numerous category codes without limiting the number of codes. At this stage, the team listed emerging ideas, drew relationship diagrams and identified keywords used by respondents frequently as indicators of important themes. The second stage involved more *focused coding* where the team eliminated, combined or subdivides the coding categories identified in the first step. Attention was focused on recurring ideas and wider higher order themes connecting the codes across respondent groups.

Analytic framework

The concept of 'risk' and how that risk is managed, is used here to frame our analysis. Recently, the way people confront and negotiate risk in their everyday lives, the way risk is perceived and how this affects individual behaviour has become an important area of public policy (Zinn, 2015). Policy makers have become attracted to the potential of behavioural economics to improve the effectiveness of government and improve lives.

The meaning of risk as applied here, is to provide both an explanation for how risk is determined among the different populations within the challenges of the prison environment, and as a framework for understanding reactions to these different perceptions of risk. For example, how is probability of risk weighed up against consequences? To what extent are people aware of the consequences of risk-taking? What are the motivations for risk-taking? What decisions are made based on perceptions of risk? Are there tensions between different participants on how best to manage risk? These are some of the issues drawn from the data.

Limitations of the study

The nature of this research is sensitive and draws a sample of participants from a vulnerable population. It was anticipated that all three operational prison establishments in Northern Ireland would participate in the study. However, despite receiving ethical approval, we were unable to secure the agreement of one of the three prisons, which means that the study does not reflect the views of female prisoners.

A further possible study limitation derives from how the sample was obtained. As prisoner participants were recruited via AD:EPT, these participants will have experience of being a service user. However, securing the co-operation of AD:EPT was central to engaging interested individuals and for securing practical arrangements for discussions to take place. Furthermore, diversity was encompassed within the prisoner sample because, while all participants were involved with AD:EPT in some capacity, their engagement was both current and past, allowing possibly differences in perspective to be acquired. The prisoner sample also varied by age, providing an opportunity to capture any age related perceptions.

All participants essentially self-selected to take part, therefore it is possible that the findings represent particular views or situations. However, the study was predicated on voluntary participation. In addition, focus group constituents represent the diversity of the prison environment and all had specific experiences which were highly relevant to the study topic, allowing a more detailed exploration of the phenomena of interest - primarily the identification of preferences, consumption patterns and motivation of prescription drug use in prisons – than would hitherto be obtainable via a quantitative survey.

SECTION TWO – BACKGROUND

Changing patterns of drug use

Patterns of drug use are changing globally, with a growing trend for synthetic alternatives to traditional illicit drugs. Contemporary data reflects an increasingly graduated and fractured drug scene (EMCDDA 2012, 2017, 2018; UNOCD, 2015). The former dichotomy between a relatively small number of highly problematic drug users and a more significant number of recreational and experimental users is changing to a more complex and dynamic picture. The widening array of psychoactive substances, increased accessibility and a much greater sophistication in technical knowledge surrounding drug use, has meant that the use of multiple substances has become more prevalent. Polydrug use² can also be used to describe the tendency to use different substances in different settings or contexts, or simply reflect regular multi-substance use related to drug dependence. Compared to traditional illicit drugs, NPS are inexpensive, relatively easy to source and frequently more potent.

Overall, the substance types that are used together depends not only on personal preferences, but also on other factors such as availability locally, specific scenes/fashion, and in the case of prescribed psychoactive medicines (such as benzodiazepines for example), on local prescribing practices. More extensive use of PDs is likewise contributing to the changing patterns in drug use (UNOCD, 2017).

Concern about the harms to individuals and society associated with the increased availability and use of NPS has resulted in legislative changes to control production and supply. For example, in the UK, the Psychoactive Substances Act, implemented in 2016, restricts the availability of NPS, making the production, supply or intent to supply a criminal offence. The Act focuses on penalising suppliers rather than consumers. Those found in possession of NPS for personal use are not criminalised unless possession is in a 'custodial institution' (for example, an adult prison, young offenders centre, short-term holding facility)³.

As noted by Ralph et al (2017), the exclusion of those in 'custodial institutions' from prosecution reflects the increased concerns at the extent and use of drugs in prison, such as those documented in recent HM Inspector reports (e.g. HMIP 2014; 2015; 2016). For example, a review of changing patterns of substance misuse in adult prisons in England and Wales (HMIP, 2015) reported a move away from the use of opiates and Class A drugs towards the misuse of PDs. The review also identified the growing use of NPS as a major problem.

² Polydrug use is broadly defined as 'the use of more than one drug' (EMCDDA, 2002).

³ http://www.legislation.gov.uk/ukpga/2016/2/pdfs/ukpga 20160002 en.pdf (page 4)

Prescription drug use in prison

As was the case with NPS, certain groups are considered more vulnerable in terms of likelihood of use and dependency, including young people who have come through the care system, the homeless population, those with mental health issues and those incarcerated. In relation to the use of NPS by those in prison, a report by EMCDDA (2018) notes that:

The rationale for choosing specific substances in prison is likely often to be explained by pragmatic considerations, such as availability and price, rather than the personal preferences of the user. (Ibid: 7)

Moreover, more vulnerable populations are inclined to veer towards the cheapest and most potent substances (Novak et al. 2016).

The prison environment is one that is particularly ripe for illicit use of PDs for a number of reasons. Firstly, capacity to access PDs in prison far outweighs that of illicit drugs. Due to the very nature of the fact the drugs are prescribed, sniffer dogs trained to detect the scent of illicit substances cannot pick up the scent of these substances, in cases where they are smuggled into the prison. Secondly, there is potential for diversion in prison whereby PDs can be considered something of a currency; individuals often trade the drugs they are prescribed. There are reports that this sometimes occurs under duress on when more vulnerable prisoners are involved. Thirdly, the threat of sanction is perceived lower among prisoners in terms of use of PDs in comparison with illicit substances; cannabis and cocaine for example, remain detectable in urine for longer periods than some PDs (Wolf, 2017). The risks associated with use of PDs are similar to that of illicit substances and vary by drug type. The EMCDDA estimate that one quarter of all drug related hospital admissions were directly associated with PDs, primarily benzodiazepines and opiates (EMCDDA, 2017)

In response to rising concerns around non-medical use of PDs in prisons, the Royal College of General Practitioners has published guidance for clinicians on safer prescribing practices within the prison environment (RCGP, 2011). The guidance includes a traffic light system through which clinicians are discouraged from prescribing 'red medicines' in prisons, to carefully consider prescribing 'amber medicines' and to prescribe 'green medicines' as first choice. Some 'red medicines' such as benzodiazepines and fentanyl were considered to have 'significant diversion potential' (2011: 14).

In line with this, the Northern Ireland Health and Social Care Board (HSCB) published advice in 2015 specifically regarding the prescribing of pregabalin and gabapentin. The general guidance highlighted the risks of misuse and advised practitioners to prescribe pregabalin and gabapentin appropriately to

minimise the risks of misuse and dependence (HSCB, 2015). The guidance stated that 'the misuse of gabapentin and pregabalin has been noted for some years in clients attending substance misuse treatment and recovery services, and within secure environment settings.' (2015: 3).

In the past, patterns of substance misuse in prisons have never directly reflected those found in the community (HMIP, 2015). Rather there appeared to be evidence of a preference for using depressants such as heroin and cannabis, to assist prisoners to 'kill time', over stimulants such as cocaine, crack cocaine and ecstasy, which many associate with a 'club' or party scene in the community. Over recent years a growing evidence base has emerged of changing patterns of substance misuse in prisons, such as the move towards prescribed medications and NPS, and away from Class A drugs and cannabis (HMIP, 2015).

Drug use in the general population

Information on drug use among the general population in the UK can be derived from representative surveys⁴. For example, the *Crime Survey for England and Wales* (2016/17) indicates that 34.2% of adults aged 15 to 59 reported they had used an illicit substance at some point in their life, 8.5% had used drugs the previous year (Home Office, 2017). According to the *Scottish Crime and Justice Survey* (2014/15) 29.5% of adults aged 16-59 in Scotland had tried drugs at least once in their lifetime, 8.5% reported using drugs in the previous year. According to the *All-Ireland Drug Prevalence Survey* (2014/15) Northern Ireland had lower prevalence rates of illicit drug taking than other regions in the UK with 27.7% of adults aged 15-64 reporting they had used illicit drugs at least once in their lifetime and 5.9% saying they had used drugs in the previous year (DoH, 2015).

It is more difficult to estimate the number of problem drug-users using general survey data. For example, those outside of these age ranges and people who do not live in private households (for example people in prisons, nursing homes or the homeless) will be excluded from the survey.

However, UK regional drug misuse databases can provide an indication of recent drug use by problem users, although problem use is defined slightly differently by each region, making regional comparisons difficult. In England, the adult substance misuse statistics from the National Drug

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⁴ Differences in the way the data is collected across the individual surveys means they are not directly comparable. However, they are useful for indicating regional patterns.

Treatment Monitoring System (NDTMS) reported the largest proportion of people presenting for treatment was for opiate (mainly heroin) dependence (53%) (PHE, 2018).

Statistics from the most recent Northern Ireland Substance Misuse Database 2016/17 show that among those presenting to services with problem drug and/or alcohol misuse, cannabis was the most commonly used drug, indicated by nearly two-thirds (65.8%) of people presenting to services. Over a third of people reported using cocaine (36.9%) and benzodiazepines (35.1%). Across Northern Ireland, one in five people using drugs indicated that they took at least one prescription drug (20.3%) (DoH, 2018a).

Drug related deaths

The most recent drug related death statistics for Northern Ireland (NISRA, 2019) show that while drug-related deaths account for less than 1% of total deaths registered in Northern Ireland each year, there has been a 60% increase in the number of deaths from drug-related causes over the past decade (from 2007 to 2017). Forty per cent of all drug-related deaths in 2017 involved diazepam, compared with 24% in 2007. The number of reported deaths attributed to pregabalin/gabapentin rose from zero in 2007 to 33 in 2017, while the number of deaths attributed to tramadol tripled in the same period, reflecting the growing prevalence of use within Northern Ireland. Consistent with the general literature, people living in areas of high deprivation were four times more likely to die of drug-related causes than those in the least deprived areas (NISRA, 2019).

When compared to data on drug related deaths in the UK, a different pattern of use is evident, with higher proportions of deaths in Northern Ireland attributed to opiates/opioid analgesics (60.8%) compared with 26.8% for the UK as a whole (Corkery et al. 2013). As found in previous years, hypnotics/sedatives; other opiates/opioid analgesics; antidepressants; alcohol in combination; and anti-psychotics play a proportionately greater role in Northern Ireland than in other parts of the UK. Meanwhile, Northern Ireland had a substantially lower proportion of deaths attributed to heroin/morphine and methadone than Britain. Some of these regional differences has, in part, been attributed to differences in prescribing practices across the UK (ibid: 85).

Prescription Medication

Illicit use of PDs, also referred to as non-medical prescription drug use (NMPDU) and dependency associated with said substances have escalated across Europe (EMCDDA, 2018; 2012). NMPDU is defined as self-treatment of a medical condition with unauthorised prescribed drugs, as well as being used to 'achieve euphoric states' (Novak et al., 2016). The European Monitoring Centre for Drugs and

Drug Addiction (EMCDDA) refers to the phenomenon as 'misuse of medicines' and defines it as 'the use of a psychoactive medicine for self-medication, recreational or enhancement purposes, with or without a medical prescription and outside accepted medical guidelines.' The groups of drugs commonly misused include sedatives and hypnotics (e.g. benzodiazepines, barbiturates and z-hypnotics); opioids and opioid substitution treatment drugs; and stimulants, particularly those used to treat attention deficit and hyperactivity disorder (ADHD). These substances can be obtained through regular prescribing practices, diversion of medicines and online vendors, particularly the 'Dark Web' (RAND, 2017). The United Kingdom is one of a number of European countries with the highest reported levels of NMPDU/ misuse of medicines (EMCDDA, 2017).

Wherein once NPS filled a niche within the traditional drug market, prevalence estimates indicate that PDs now hold this position (EMCDDA, 2017). Growing concern about the problems caused by some prescribed medicines was a key factor in the commissioning of a public health evidence review by Public Health England (PHE) to examine available data and literature on dependence and withdrawal symptoms associated with prescribed medicines, and how they can be prevented and treated. Included within the scope of the review are benzodiazepines, Z-drugs, GABA-ergic medicines, opioid pain medications, antidepressants and community prescribing (prescribing in hospitals and prisons has been excluded from the review). The review is due to report in spring 2019.

The Northern Ireland context

There has long been an undercurrent of prescription drug misuse in Northern Ireland with reported high prescribing rates, particularly of sedatives in the treatment of anxiety and depression. When comparing prescribing trends, Northern Ireland has significantly higher levels of anti-depressant prescribing than the rest of the UK (Kelly et al. 2003), including significantly higher anti-depressant prescribing costs per capita than other UK regions (Donnelly, 2014).

Much of this has been attributed to the legacy of the Troubles (Bunting et al. 2013; O'Reilly and Stevenson, 2003; Tomlinson, 2007); poor physical health in the population generally (Newtown et al. 2015) and high levels of socio-economic disadvantage and deprivation (Abel et al. 2016).

Recent estimates of the prevalence of anti-depressant prescribing in Northern Ireland from 2011 to 2015 by Shevlin et al. (2019), indicates that anti-depressant prescribing remains higher in Northern Ireland than in the rest of the UK. The authors used administrative data linkage techniques to carry out a full population-based assessment of anti-depressant prescribing. They reported that the percentage of the Northern Ireland population aged 16 or over receiving a prescription for anti-depressant medication was 12.3% in 2011 and 14.3% in 2015, and over the five-year period was 24.3%

(ibid, 3). While the authors noted several limitations of the research (e.g. not all anti-depressants were included in the analysis), they found that prescribing rates were likely to be higher than the prevalence of depressive disorders. The study noted the likelihood that factors other than depression (such as socio-economic disadvantage) is associated with anti-depressant prescribing, suggesting that 'alternative non-pharmacological forms of help and support for people with problems associated with low mood are needed.' (2019: 6).

Recent health inequalities data for Northern Ireland (DoH, 2018b) is consistent with existing literature reporting a significant association with socio-economic disadvantage and increased mental ill-health. For example, the rate of suicide and self-harm in the most deprived areas in Northern Ireland is approximately three and a half times the rates in the least deprived areas. While prescription rates for mood and anxiety increased across all areas, the rate in the most deprived areas was two-thirds higher than in the least deprived in 2016 (ibid: 23). In addition, the area of alcohol and drugs was among the largest inequality gaps recorded for the majority of Trusts (alongside self-harm, smoking in pregnancy and teenage births).

The inequality gap in drugs related mortality was the most notable deprivation-related widening of gaps, with rates in the most deprived Local Government District (LGD) areas between two and three times the LGD average rates (ibid: 6).

There is an extensive literature on the ways in which poverty is said to impact on mental health, although the relationship is complex, both in terms of how mental health is measured and assessing the direction of causality (Payne, 2012). For example, poor mental health can impact on an individual's employment opportunities, leading to poverty. At the same time, poverty may lead to mental health difficulties as a result of stress and low self-esteem that come from trying to manage on low income (Daly and Kelly, 2015). However, associations have been found between poverty and increased stress and anxiety, hospital admissions, out-patient use, suicide and parasuicide (e.g. Weich and Lewis, 1998; Butterworth et al. 2009; Weich et al. 2006; Stafford et al (2008) — all cited in Payne et al. 2011). Similarly, research has reported that social problems, including mental ill health, drug abuse, imprisonment, social mobility, are worse in unequal rich countries (Wilkinson and Pickett, 2009; 2018).

The international literature reports that while the relationship between conflict and poverty is complex, poverty and high levels of inequality are nevertheless high risk factors for conflict (Bloomberg and Hess, 2002; Goodhand, 2003). Evidence shows how areas that experienced the highest intensity of violence during the Troubles were areas with more households on extremely low incomes (Fay et al. 1999), while the number of death and injuries resulting from the Northern Ireland

conflict has been greatest in the most disadvantages areas (Hillyard et al. 2005). Likewise, significantly higher rates of deprivation, together with poor physical and mental health were reported for those with 'high' experience of Troubled related conflict compared to those with little or no experience (Tomlinson, 2016; 2013).

Health professionals have also become more aware of the mental health needs of individuals and families impacted by transgenerational trauma (where trauma is transferred from one generation to the next) again, as a legacy of the Troubles (Commission for Victims and Survivors, 2015).

Alongside these factors, an evaluation of mental health services in Northern Ireland (Wilson, et al. 2015) reported a lack of alternative therapeutic services in the community and provided evidence that a medical model approach still dominated mental health care in certain areas in Northern Ireland.

SECTION THREE - FINDINGS

PATTERN OF USE

It is not possible to know exactly the extent and type of drug misuse in prisons or in the wider community (MHIP, 2015) and this study did not seek to establish prevalence of substance use. Rather the specific use of PDs in prison was investigated via discussions with prisoners, prison staff and healthcare staff. Areas of enquiry included the identification of preferences, consumption patterns, motivation and so forth. From the perspective of participants, a number of key themes emerged which inform our understanding of this issue.

There was widespread agreement among prisoners, prison staff and healthcare staff that the use of PDs has increased substantially over the past three to four years, resulting in a situation where PDs now surpassed illicit drugs in terms of supply and demand. Discussions revealed definable trends in usage of PDs – both in relation to prevalence and in the combination of consumption patterns. A number of drugs were frequently referred to by all participants as being the most common in use. These were:

Codeine (opioid pain medication)

Diazepam (benzodiazepine)

Fentanyl (opioid pain medication)

Lyrica (a brand name for Pregabalinan anti-convulsant/pain medication)

Methadone (a synthetic opioid substitute)

Tramadol (opioid pain medication)

Subutex (a brand name for buprenorphine, an opiate substitute)

Xanax (benzodiazepine)

It was also noted that certain drugs will wax and wane in terms of their commonality/popularity, although views on the status of specific drugs sometimes differed between prisoners and prison staff. For example, prisoners were more likely to describe Diazepam as 'out of the picture now' (Participant, Prison B), or to have been taken over by another drug, as described by a participant in Prison A:

Diazepam was a big thing but then subutex came in.

Meanwhile, prison staff were more likely to consider diazepam to still be an issue, citing it as among the drugs found when carrying out 'search and report' procedures.

However, currently the consensus across research sites points to pregabalin as being 'probably number one', holding constant for the past three to four years. Opioid pain medication (e.g. codeine and tramadol) was reported by healthcare staff to have also remained reasonably constant over the same period. Xanax was described by healthcare staff in Prison A as increasing in use within the past year and, from their experience, trending both in the community and within the prison site.

Meanwhile, there were much less references made to NPS, with prison staff suggesting that currently these substances were not so much of an issue because PDs were more readily available and also of good quality. When querying this further, part of the reason was thought to be due to the unpredictable nature of NPS. Comparisons were drawn with jails in England, where NPS is highly prevalent, and where the prisons are bigger with much larger populations. The speculation was that in smaller jails like those in Northern Ireland, there will be 'two or three prisoners that will be the top dogs in those houses so obviously they want to control it' (Prison staff, Prison B). Hence, unpredictability makes NPS harder to control.

The presumption of some prison staff was that a shift towards NPS may come about if supply of PDs deteriorated. This was how one Officer in Prison A described the situation:

If they stop the medication without anything then that's going to push them towards the illicit drugs going down the road of spice – it hasn't hit as big in here and I asked the prisoners why, and they said nobody likes it. But if there's nothing, that's the alternative - right we can't get pregabalin – we'll go to spice.

In terms of consumption patterns, healthcare staff reported regularly treating prisoners who have had problems as a result of taking prescription medicines in combination with other drugs (both illicit and prescription medication diverted from other sources) and/or taking PDs well above the recommended dosage. Healthcare workers reported a changing landscape, where before the main issue they would be faced with was treating opiate dependence, now it was more likely to be polydrug use, as it sits within the drug use trajectories – and which is considered more difficult to manage. As one healthcare worker (Prison A) noted 'there is no quick fix for that'.

Offenders in both Prisons described similar incidents that they were aware of, where a combination of drugs were taken as a matter of course, and where exceeding the dosage was not uncommon. At

the same time, prisoners wanted to make it clear that not all prisoners abuse PDs. They felt aggrieved because they believed they were being unfairly judged based on the behaviour of others.

What was evident, was an awareness by prisoners of the composition of particular prescription medication and the potential outcomes. In Prison B for example, fentanyl and xanax in particular were highlighted as being extremely risky compared to other PDs, mostly because of the strength of the substance and the difficulty in relation to dosage management. This was how two different participants described these PDs:

Fentanyl mixed with anything actually – you're playing with fire because it's so strong – fentanyl is that strong that Naloxone won't reverse it, it's a dangerous thing with anything. (Prisoner, Prison B)

Xanax is a slow release substance – when people take it they think they're taking sub or a line of something they're used to and they put out a big line...It's the most underestimated drug I've ever taken, no exaggeration. (Prisoner, Prison B)

In relation to pattern of use, an associated and significant sub-theme is that the pattern of usage of prescription medication within the prison estate is a reflection of general trends within the community, albeit in nuanced ways. This was the opinion of the following clinician (Prison A) who drew similarities in prescription drug use between patients in his local practice (located in an area of high deprivation) and his patients in prison:

Well what I would say is, prison is a reflection of society... I'm a GP outside and work here as well and we see a lot of prescription drug uses in society you know, so every prison is going to be a very concentrated reflection of the patients...which are from areas of deprivation...places where actually resources are fewer and there is more over-prescribing. So we get that very tightly through our doors through the 4000 people that come through here. So yes, I definitely think prescription use is a major problem.

The majority of prison staff expressed similar opinions, describing the issue of PDs as something that co-exists in the community, with those coming into prison already on a range of legitimately prescribed medication, with the expectation that their existing medication will be maintained. Or, they are already taking PDs, illicitly obtained or diverted from other sources, with the expectation that they will be able to source similar drugs while in prison.

Views from prisoners also point to the use of prescription medication being an issue which coexists with life in the wider community. The following participant (Prison A), situated the use of PDs within the context of violence related activity as a consequence of 'the Troubles' legacy in Northern Ireland:

There is one thing I will say about most of the ones in this room - they have either been shot or beat by paramilitaries and the troubles legacy is still running through the likes of diazepam, the likes of tramadol... all of us in here we've all been done [by the paramilitaries]. That's where you see a pattern that it is tramadol, pregabalin, gabapentin, codeine. They are being prescribed because of what has happened and then from there on in your tolerance goes through the roof and maybe you are taking two KPac one week and then about six months down the line you could be taking eight of them a day and it just keeps going up and up and up.

Conversations with all participants supported the view expressed by prison staff that large numbers of prisoners come into prison with medication which has been prescribed by their G.P. Common conditions that the medication is prescribed to treat include mental health problems such as depression, anxiety, stress and pain relief from debilitating medical conditions.

It was the view of both prison staff and healthcare staff that the wide availability of PDs within the community *per se* is one of a number of drivers behind the increased use of PDs in prison. This was a consistently recurrent theme throughout the interviews. There were common viewpoints attributing this to the recent conflict, with implications of an intergenerational affect – where PDs has become commonplace:

For years it was blamed on the Troubles and the fallout from the troubles. We're getting a generation now that have been on medication since they were kids, pre-teens, whether that's to do with the troubles, their mother and fathers medication, I don't know but as he says, they don't care. (Prison officer, Prison A)

Just as increased mental health issues have been documented in the community, one issue running constant throughout discussions with all participants was the prevalence of poor mental health among prisoners.

The following healthcare participant (Prison A) was adamant that the problem of the misuse of PDs cannot be looked at in isolation, as only being applicable in the prison environment. The participant not only firmly situated the issue in the community, but also viewed it as a consequence of inadequate

community services. In particular, a lack of services to deal with childhood trauma was believed to escalate the problem:

Well I think when you have more community services, I think prison is not the problem I think the problem is what is available in the community for a lot of these young people, our issues are things like childhood trauma experiences so somebody who is 8 has an ACE [adverse childhood experience] or whatever you call it...Then they get to 11 and don't know how to deal with it and their mate is there saying 'oh I took this tablet it helps me to calm down', they take a Diazepam and all of a sudden they are on this journey. So it's trying to pick up those traumatic experiences as a kid to try and manage that more effectively.

Links with the community were reiterated among other healthcare staff, with the belief that trends in the community impacted on trends in prison:

It's to do with the trends at the minute and the trend in the community would be legal medication so our trends seem to be the same, whether its xanax or pregabalin, stuff like that are big hitters in the community. (Healthcare staff, Prison A)

However, while legitimately prescribed medication may increase availability in the community in general, it is only one part of the bigger picture.

There were a number of factors which repeatedly featured in discussions with all participants about what is driving increased availability of (and demand for) PDs in prison. Mostly these centred on things like cost, profit, evasion, suppression and quality, all of which is reflective of the general literature (e.g. CJINI, 2016; CSJ, 2015; EMCDDA, 2012; HMIP, 2015). While participants focused their discussion on availability in prison, conversations were often interspersed with references to the community, which made it difficult at times to separate the two locations. This is also an indication of how much the issue is interconnected with the rise in prescription drug use in wider society. These views are summarised below:

Cost:

All participants noted that PDs are considerably cheaper than traditional 'illicit' drugs. The situation was described as basic economics - the emergence of the 'dark web' and the ease of access to internet sources has both increased supply and dampened down prices.

it's easy to get it off the internet because you know what you are looking for so boys will tell me they will order 500 Diazepam from China and it just comes in a huge big box - or not even a huge big box. (Healthcare staff, Prison A) They're cheaper than other drugs outside. (Prisoner, Prison B)

It's the availability of PDs on the outside too – seven years ago people were bringing in shitloads of coke – now they're bringing in 40 foot lorries full of blues cos they're getting it so cheap – the dark web. (Prisoner, Prison B)

Profit margins/Supplementary income:

Because PDs are cheaper (and easier) to obtain than illicit drugs in the community, there are more financial incentives to bringing them into prison where demand is greater, meaning their value is considerably higher, meaning profit margins are bigger. Profits may not only be restricted to increasing prisoner income but may, on occasions, be used to supplement family income.

I suppose it is a self-dependant industry so it is, so you do have family members come in and smuggle them in on visits as well because it is actually funding a family in the community, which is sad but it's reality. (Healthcare staff, Prison A)

Lucrative business – people can charge a lot of money in here for something that can be bought so cheap outside. 100% mark-up. (Prisoner, Prison B)

Concealment:

Prescribed medication is considered easier to hide, particularly the likes of Diazepam (e.g. internally secreted) and medications which come in clear patches which were perceived to be easily hidden (e.g. in the mouth).

I've a lot of boys that are taking patches. So the patches are clear, so they are coming in through visits, the guys are keeping them in their mouth. I see boys every day of the week who have fentanyl and morphine patches in their mouth and they are not going to find them. (Healthcare staff, Prison B)

Evasion:

It is less problematic to get PDs into prison because sniffer dogs are only trained to detect mostly illegal substances. They are not trained to detect prescribed medication because of the important medicinal role they play in treating illnesses and the fact that they are widely used legitimately within the community.

They're undetectable to our drug dogs, we can't train our drug dogs to detect prescription meds because staff would fail, visitors who have chronic illnesses would fail, if you look at the percentage of our population who are on prescription medication – we would have very quiet visits and that is the scenario we are in and that's the undetectable currency that they are dealing in. (Prison staff, Prison A)

Also connected to evasion was the opinion that there was less chance of PDs being detected in a regular drug test because they leave the body quicker than most illicit drugs.

Cannabis stays in the body for 28 days and they were getting caught, so Cannabis went away for a long time. Yellows and Blues were coming in about the time we got rid of Cannabis...they moved onto different things, find different things that you could get in past the dogs and would get out of your system sooner. (Prison staff, Prison B)

Lyrica don't show up on the drug tests unless they do a full screen and you only get a full screen if you are bringing drugs in or under suspicion. People don't want to give up their TV...takes four months to get it back. (Prisoner, Prison A)

Quality assurance:

The issue of 'quality assurance' emerged more often in discussions with prisoners than other participants in relation to what was driving supply and demand and, as a consequence, wider availability. Quality in this context can be described as the perceived superiority of PDs in terms of their composition - part of the reasoning being that because PDs are made in a controlled medical setting, their component was purer, so the risk of purchasing something substandard was reduced. This is how one participant described his thoughts on the issue:

You know fentynal is manufactured in a laboratory, it's the cleanest hit of gear that you are ever going to get, cleaner than any heroin that you are ever going to get. That's 100 micrograms for whatever...you know exactly what that is going to do. You could get a bag of gear and it could be crap. If you get this patch you know exactly what it is and you'll say 'right

ill pay this, whatever it is for it' cause you know you are going to get the hit. It's good, it's clean, it's made in a lab. (Prisoner, Prison A)

According to healthcare workers in both prison sites, there was also a perceived safety element to it, where PDs were viewed as 'less risky' because they were something that can be prescribed by the medical profession. The irony, as pointed out by healthcare workers and prison staff alike, is that there is no guarantee that PDs obtained from other sources (e.g. the internet, unlicensed suppliers) are what they claim to be. In fact, in all probability the risks may be greater, given the lure of financial profiteering to be made from counterfeit medicines. Similarly, when people choose to self-medicate the risks of certain combinations of PDs can be detrimental and/or fatal.

As noted above, it was clear that prisoners were attuned to the risks involved. Although some prisoners may be more risk aware than others, leading to a situation of bullying or the subtle harassment of those with less awareness. For example, when discussing PDs obtained on-line, the following prison staff participant pointed out the risks involved, initially alluding to prisoners' general indifference. However, the final sentence makes it clear that the circumstances around purchasing PDs from the internet is more complex, with greater risks to those more vulnerable, such as weaker prisoners being used to test substances on, before they are used by others.

It's a risky one 100%. As soon as you take something you have bought off the internet you are taking a risk anyway and a lot of these boys because it's blue or yellow they assume it's a blue or yellow and not necessarily so. So there is a lot of stuff coming in off the internet and it's a lot stronger which is a problem. So a lot of it is being tested on other prisoners before they try it themselves - which is again, a form of bullying. (Prison staff, Prison B)

To get a better understanding of motivation and what prompts people to make certain choices, it is important to look at how risks are perceived and subsequently managed and the basis upon which decisions are made or rejected.

SECTION FOUR – RISK AND RISK MANAGEMENT

The concept of 'risk' is used here to frame our analysis. Interpretation of the data is aided by examining the way in which different perspectives of 'risk' and ultimately how that risk is managed, underpins decision making.

Sociological theories are underlined by different understandings of risk, influenced by various academic disciplines (Zinn and McDonald, 2018). For example, some research that focuses on risk taking behaviour, attempt to understand what motivates people to make irrational choices that appear contrary to their best interests, such as smoking for instance. The concern here is to improve people's judgement and encourage a move towards more rational decisions (Thaler and Sunstein, 2009). However, very often solutions for improving risk behaviour fail because no account is taken of the context of people's lives, how their environment affects behaviour and the ability people have to manage risk (Standing, 2011).

Prisoners

A nuanced theme that was present during interviews with prison staff was the suggestion that prisoners were either oblivious to the risks involved in the misuse of PDs – 'people aren't in here for having a great risk awareness' or they were simply prepared to take a gamble. As one prison staff member (Prison B) explained:

A lot of the stuff is coming in from America from the internet so they don't actually know what it is. They just take a gamble on it and a lot of the stuff that comes from American is 5 or 10 times the strength you get in the UK.

Yet, discussions with all prisoners suggested there may be a higher risk awareness than prison staff presume. For example, prisoners were alert to the addictive nature of PDs, the higher risk of accidental overdose, the financial implications of dependence such as debt and bullying and the associated problems this posed for families on the outside and the consequences of detection (e.g. loss of privileges). Some of the risks discussed by prisoners related to their own experiences of PDs (e.g. exacerbated mental health problems), other examples related to how PDs can lead to more dangerous drug taking addiction:

From I've come in here, I've seen people move from prescription drugs to heroin, and it's lethal. I've been here for three years and I've seen a big rise in people moving to heroin and I think the prescription drugs and opiates are a big part of that. (Prisoner, prison B)

When enquiring what the possible motives might be for their consumption, a number of key explanations emerged, one of which was self-medicating in response to having their regular prescribed medication reduced or removed.

A common explanation given by prisoners was that changes to their medication while in prison prompted them to look for illicit medication to offset the effects of the change and/or to supplement what they were taking previously.

We will take anything we can get because we can't get what we are used to being prescribed. (Prisoner, Prison A)

A number of prisoners drew comparisons between their previous medical treatment in the community with their treatment in jail, believing prison healthcare to be widely deficient. The vast majority of prisoners we spoke with had complex personal histories including childhood trauma, poor mental health; some had also been the subject of self-styled paramilitary assaults. Hence, almost all had a long-term profile of being on prescribed medication for various serious conditions. Over time, they had built up a high tolerance to the drugs they were being prescribed, requiring their medication to be increased to bring about the same impact. Therefore, their personal dosage was over and above what would be considered the normal standard dosage for anyone else. This is described below by a participant in Prison A:

I remember my doctor saying to me, 'you are technically overdosing every day, it's just your body has built up a tolerance, whereas if you were to give somebody what you are being prescribed today they would die. It just happens your tolerance is through the roof and you are needing to be prescribed more and more and more.'

The same prisoner went on to explain why he believed moderating/stopping medication for someone like him, without proper detox management, encouraged people to seek illicit drugs and/or PDs diverted from other sources. The participant continued:

The problem is, within the jails no one is getting detox, nobody is being brought down in an actual controlled environment, they are just stopping them and playing God with your life and then you have to go and get illegal drugs or prescription drugs or both depending on what you are being prescribed because you are trying to self-diagnose.

There was a strong sense of grievance among prisoners at the prescribing practices within the prison environment. The general view was that the system operated along the line of suspicion, where all prisoners were being judged according to the actions of others. According to many prisoners, they

believed they were automatically presumed to be drug seeking if they approached the G.P. in prison with a medical complaint. Prisoners queried why their own G.P. felt it appropriate to prescribe certain medicines and yet prison healthcare staff felt it was reasonable to over-rule that decision.

Deteriorating mental health status was a particular concern for prisoners, and was an area where it was felt the current prescribing regime was having a significant negative impact. As one prisoner in Prison A phrased it:

It's important to highlight that 100% of men in this room have mental health issues and 100% of the men in here are not getting the treatment in jail.

Again, comparisons were drawn with life in the community. Prisoners felt that the prison authorities were attempting to address health issues in prison by employing similar methods as those used in the community. For example, the following participant had been receiving pain relief medication for seven years and had recently had his medication reduced. He described the doctor's advice as ridiculous and said he would self-medicate if he got the chance because he did not believe his condition was being treated properly.

I can't get any prescription drugs to buy, but if I could buy them I would and treat myself normally because the doctors in here aren't doing it. There is one doctor down there...and he said 'oh no you shouldn't be still bad' and I said arthritis gets progressively worse not better. Then he told me to lie in bed more... 23 hour lock up like! (Participant, Prison A)

Pleasure seeking *per se* did not feature strongly as a motivational factor among prisoner discussions. Rather, explanations were couched in the ability of PDs to help 'get the day in' or to 'take your mind off things'. Boredom and lack of alternative activities were among the reasons given by prisoners for considering that the consumption of PDs were worth the risk. Almost all prisoners noted that there should be extra activities, particularly for those prisoners who had their medication reduced or withdrawn. This is because prisoners felt that extra activities would act as a distraction from the effects of withdrawal and make up for the perceived lack of controlled detox facilities. Most of the comments referred to wanting additional gym sessions, expressly because their regular gym times had been reduced or terminated. Other comments referred to longer/additional sessions with AD:EPT. Services delivered by AD:DPT include advice on harm reduction and one-to-one counselling.

The need for more structured education and training opportunities was another issue discussed, although not to the same extent. One participant (Prison A) expressed the desire for greater continuity between courses in prison and in the community, which would offer the possibility of following

through with higher level courses on the outside, as opposed to stopping once an intermediate level had been achieved. This particular participant felt that the lack of opportunity to progress to the next skills level hindered the chance to gain a trade, delaying his options for rehabilitation:

I am an NVQ level two joiner. How am I being rehabilitated? I can't go and do level three. I can't even finish the rest of my trade. I have to wait until I get out of here ... wait and wait to go to tech to go back and do it.

The legality of PDs was another key motivating factor. There was a sense that consumption of PDs involved less of a gamble because the consequences of getting caught with PDs were less than it would be for traditional illicit drugs. 'Legality' in this sense was also closely connected with issues of 'acceptability' in that there was perceived to be less stigma surrounding PDs than illegal drugs. As one prisoner (Prison A) described it:

It's become more acceptable to be on medication than it is not to have any medication.

The suggestion, from the follow-up quote made by another prisoner in the same focus group (Prison A) is that where acceptability leads, trends will follow:

There seems to be more of a trend now, where people want prescription drugs, they don't want illegal drugs now.

The same participant went on to link the trend for PDs with issues of 'quality' (which emerged as a factor for increased availability), explaining how PDs are desired because the risk of getting a substandard (i.e. counterfeit) product is lower. He went on to explain further:

They know what they are taking is going to be exactly what it says on the tin because it is hit or miss with illegal drugs. You can get good cannabis, bad cannabis, good coke, bad coke, good heroin, bad heroin. (Prisoner, Prison A)

It is not clear from the excerpt above if, by 'getting exactly what it says on the tin', the participant is insinuating that PDs reduce the risk of getting an inferior hit, or if desirability is driven by the perception that legitimate medicines reduce health risks, or both. What does emerge from the data so far is that motivation is inextricably linked to wider availability.

Prison staff

The increased non-medical use of PDs in prison also poses significant risks to prison staff and healthcare staff working in prisons, not only in terms of physical harm but also risks to their own

mental health and wellbeing. These risks also have to be managed during the carrying out of everyday duties.

Just as prisoners talked about having their medication reduced or withdrawn, prison staff also discussed prescription practices and how this can sometimes place them in a very vulnerable position, particularly if a prisoner's medication has been reduced or withdrawn without proper 'step-down' procedures. This was discussed in Prison A in much more depth than Prison B. Many Officers in Prison A reporting having to deal with the 'fall-out' from prescription practices and being left 'to pick up the pieces'. Prisoners' self-harming, conveying suicidal thoughts and causing general disruption after they have had their medication reviewed and/or reduced were some of the situations prison staff had experienced.

Specific reference was made by a number of prison staff in prison A to the recent advice issued by the Health and Social Care Board (HSCB) specifically regarding the prescribing of pregabalin and gabapentin. The general guidance highlighted the risks of misuse and advised practitioners to prescribe pregabalin and gabapentin appropriately to minimise the risks of misuse and dependence (HSCB, 2015). Participants were of the opinion that the drugs were to be stopped and were concerned about the risks this posed about stopping the drugs without a back-up plan in place. As one participant noted:

As of the new year, pregabalin in prison is being stopped and there's no plan. It's just if you take pregabalin, it's being stopped.

Another colleague in the same group added:

I'm just curious as to what the plan for fallout is because there will be deaths from that.

The general feeling here was one of frustration because Prison Officers believed they were being called on to deal with mental health issues, which was beyond their responsibility, and which they were not professionally trained to do.

While the 'fall-out' from prescription medicine being removed included physical risks to their own safety, it also posed serious risks to their professional reputation and job security. This is because they believed incidents of self-harming, parasuicide and suicides are investigated on the basis of surveillance of Prison Officers' actions as opposed to some of the other important factors such as prescribing practices for example:

God forbid somebody did take their own life – the investigation will centre around us and what we have done and not the doctor and why the meds were stopped. (Prison staff, Prison A)

It was notable that prison staff picked up on similar issues raised by prisoners, albeit from their own individualised perspective. For example, the lack of alternatives available to prisoners who had their medication withdrawn was mentioned. Interestingly, additional sessions with AD:EPT and extra sessions in the gym were also proposed by prison staff as possibilities to help manage the issue:

If we're stopping people's medications there should be something looked at to help them, whether it's extra sessions with AD:EPT, whether it's extra sessions in the gym – something else to focus their mind on apart from the medication. There's no alternative being given – just your meds are stopped and that's it. (Prison staff, Prison A)

The recognition of AD:EPT as a positive initiative is noteworthy because the programme had not initially been well received by all Prison Officers. As the following participant explained, the programme content (e.g. awareness raising, harm reduction) had raised some suspicion among his colleagues, but this had waned as the programme developed:

...we were extremely annoyed about it but in hindsight it was the right thing. They gave them pieces of paper saying 'if you have got it, this is how you cut it up and use if safely'. Harm reduction...in hindsight now it probably was the right thing to do to save lives. (Prison Officer, Prison B)

Similarly, the discord between styles of healthcare provided in the community and healthcare provided in prison also featured in discussions with prison staff. Staff we interviewed talked about the disconnect between trying to address health issues in the prison environment in a similar way to how it is tackled in the community. This echoes the views of prisoners who queried the relevance of advice offered by healthcare staff. The Prison Officer explained it this way:

When prisoners come in here they're guaranteed the same level of healthcare as they have on the outside, that doesn't follow through...There are leaflets they give out about stress and anxiety, take a long walk... you know they can't take a long walk in here. Get a good night sleep – there are certain things like, we have to wake them at 7am for a response check, make sure they're still alive, but this is still the literature they give out. On the outside, the person who gets their medication stopped can go for a long walk, can go and speak to a free community counsellor, these are not things that can happen on the inside.

When discussing widening use of PDs, prison staff gave examples of certain clandestine behaviour that they believe some prisoners engage in to obtain PDs – both inside and outside of the prison

establishment. Examples ranged from extreme action like arranging their own shooting, as the following prison staff participant explained:

The prisoners will tell you, some have organized their own shooting to get all that medication, to get DLA. Just because they're not risk aware, doesn't mean they're not cunning. Straight away you get DLA if you're prescribed pregabalin. (Prison staff, Prison A)

In this case, financial gain is deemed to be an additional motivating factor as particular PDs are believed to open doors to receipt of disability benefit.

Other examples given by prison staff included prisoners deliberately self-harming to get PDs:

There are people in here who would actually throw the challenge out to you and they'll go to the nurse and if she says 'you're not getting that', they'll say 'oh, am I not?' – and the door closes and the rope goes up. Probably an hour or two later they will have got what they wanted...and they'll say 'I told you so'. (Prison Officer, Prison A)

Less extreme examples included prisoners presenting to their G.P. in the community before they come into prison to ensure that specific PDs are recorded in their medical notes. They also described incidents of prisoners presenting to the prison G.P. with exaggerated symptoms to try to get their medication increased, either for self-use, or diversion, or as a result of bullying by other prisoners.

However, the biggest risk was considered to come from PDs being brought into prison at specific points.

Common pressure points across both prisons were identified as PDs being smuggled in during visits, prisoners coming back from home leave, returning from work outside of prison or from prisoners who have been released and have ended up returning to jail soon afterwards.

Physical risks to prison staff were associated with low staffing levels by participants in both prisons. Participants in Prison B highlighted discrepancies between staffing levels during the day compared to night time as potential vulnerable risk points, believing more manpower would reduce the use of PDs in prison. Prisoners suspected of being at risk of overdosing on PDs are given their medication via supervised swallow. While this was thought to alleviate risks as a consequence of overdosing, at the same time the additional work that supervised medication requires was thought to generate another pressure point. This is because supervising prisoners' medication in general already takes up so much time:

The whole meds list for the morning, between mental health and all the rest was 135 prisoners, that was between 2-3 staff between the hours of 9am and mid-day, which by anyone's standards, you're a miracle worker if you can facilitate that. (Prison Officer, Prison A)

Lack of engagement between prison staff and healthcare staff emerged as another point of contention. This was mostly discussed in the context of conflict between prison staff being kept uninformed about a prisoner's medical profile and healthcare staff defending patient confidentiality. Discussion centred around the view that prior knowledge would help prison staff manage risk more easily. Some of the risks were associated with potential physical harm to staff emanating from infectious conditions versus prisoners' human right to privacy:

...because of their human rights and because of article two rights⁵, we're not allowed to know.

My article two [rights] apparently doesn't matter. (Prison Officer, Prison B)

Some Officers alluded to power struggles between medical staff and mental health teams, feeling that this left Prison Officers even more powerless as they felt they could not get involved in medical disputes. Generally, it was thought there should be clearer protocol regarding lines of engagement among all staff.

However, the issue of being kept informed provoked some ambivalence, as other Prison Officers felt that not being privy to medical information actually helped them manage risk better. This was because distance from medical information shifted the onus of accountability for mental and physical health issues back to the medical profession. This is how one Prison Officer in Prison A explained it:

They come to us bumming and blowing and crowing and roaring 'I've been taken off my meds'. My go to line is 'that's an issue between you and the Trust – I'm a prison officer – that's a medical issue'.

Connected to being kept informed was the perceived gap in knowledge between prison staff and prisoners regarding what participants referred to as 'jail pharmacology'. Participants recounted previous training on drugs awareness that they received which was regarded as totally inadequate and antiquated. At least one prison staff member talked about looking up google to get information on why certain PDs were being requested. Others said they got their information from prisoners. This lack of knowledge was thought to potentially increase risk (to themselves and prisoners) because they

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⁵ This refers to Article 2 of the Human Rights Act 1998: Right to Life. The Human Rights Act sets out the fundamental rights and freedoms that everyone in the UK is entitled to. See https://www.equalityhumanrights.com/en/human-rights/human-rights-act

did not fully understand the symptoms of certain drug combinations, hence they were unprepared for the consequences.

Healthcare staff

Like prisoners and prison officers, healthcare staff also connected the issue of PDs with what is happening in the community. Links were also drawn with the legacy of the Troubles, as was a lack of alternative community services. However, healthcare staff were more likely than other participants to move beyond these issues by also locating the issue within the context of prisoners' traumatic life experiences and socio-economic circumstances like deprivation and poverty. All of these issues are combined in the one quote below:

I don't think they are using them anymore in here than they are using them on the outside, so people always think that prison is worse but it's not. If you went into West Belfast, into one of the apartments up there you know you would see it or North Belfast, East Belfast, anywhere you know? Some of the more deprived areas. Why do they use it? Probably easy access to be honest. Northern Ireland historically has been an over-prescriber of medication as you know, whether that's historically form the troubles, from all the traumas or actually to be honest a lot of it is from a lack of funding to alternative services in the community. So what else is there to deal with this young fella whose dad was blown up, you know? They can go the WAVE in North Belfast but once that runs out where do they go? And then that's when they end up getting on lots of tablets, so that is a big issue. (Healthcare staff, Prison A)

For those providing healthcare, the desire to respond to patient need is innate, but this is constantly challenged by the need to be more circumspect about prescribing for patients in prison than those outside prison. The inherent health risks associated with the concurrent use of multiple substances within a pattern of polydrug use was noted by healthcare staff as significant.

Responsibility for managing risk is set out in guidelines issued by the Royal College of General Practitioners (RCGP) for clinicians on safer prescribing practices within the prison environment. Healthcare staff have to balance individual patients' health needs against security and safety risks. But not only do clinicians have responsibility to the patient, they also have a duty to reduce risk to the prison population (RCGP, 2011).

Healthcare staff we spoke with recognised themselves as a means of access to PDs, open to patients presenting with exaggerated symptoms to obtain specific drugs which could result in personal misuse or the PDs being diverted to others – either by selling on or through bullying (which aligns with what

prison staff said). When asked if such risks impacted on prescribing practices, the following participant agreed that they did:

Definitely, we have different guidelines so there is really quite tight guidelines for prescribing in prison so the World College of Psychiatry have a joint documents called Safer Prescribing in Prisons, NHS have a pain prescribing in prisons formula that we use so it's actually very different to the community so we are a lot less likely to give pregabalin in here, it just won't happen. (Healthcare staff, Prison A)

However, the guidelines alluded to in the above quote also state that 'The standard of care should be equivalent to the standard that is delivered in the community' (RCGP, 2011: 7). Yet, as emerged in discussions with prisoners and prison officers, treatment in the community and treatment in prison can be at odds with each other, given the greater level of responsibility and, ultimately accountability, placed on the healthcare professional. This was succinctly explained by a clinician in Prison A, who pointed out the lack of liability for choices made by patients in prison and how that liability is transferred to health professionals:

With us, our main issue is looking after them so as a GP in [town] I have to look after somebody sure, but whenever they are in their own house they have to take certain responsibility for their own actions. Whereas here, we look after them 24 hours a day so that's why we are tighter. If anything happens to our patients here - the buck does stop with us.

The safe administration of medication emerged here (as it did with prison officers) as a pressure point in terms of demand on resources. Although in this case, it was discussed more in relation to time and financial pressures as opposed to physical risk. Healthcare workers were obliged to carry out 'risk assessments' with new prisoners to ascertain if they could safely be in possession of PDs. Medication will be reviewed if it is deemed excessive and reduced accordingly. According to the majority of participants, the number of people requiring supervised swallow was increasing exponentially. As a result, any additional resources were being averted for risk avoidance and surveillance purposes, when they could be used for other more beneficial purposes. Diversionary activities featured again, such as gym classes, cookery and self-development courses:

I think more gym, that's what we are trying to push for now. It's just the resources we have. We would want to be doing cookery classes, all the self-esteem, all these different groups that are going to benefit them and their recovery and make them feel better about themselves. (Healthcare staff, Prison B)

Pressure points

The pressure points discussed previously were identified by healthcare staff as a type of 'revolving door', more prevalent at stages of entering, leaving and returning to prison. Examples given echoed those expressed by prison officers: offenders going to their G.P. in the community prior to entering prison to ensure they have specific drugs on their medical record in a pre-planned strategy to increase their chances of obtaining prescription medication in prison; attempting to have their medication upped by the prison G.P. prior to release, in order to 'stockpile' before going back into the community; smuggling PDs when re-entering prison, either for self-use, or to use as a form of currency, or as a result of being bullied into it by other inmates.

Connected to these pressure points was the risks attached with potential for slippage in terms of continuity of a patient's treatment between prison and the community. A case in point was a patient who had left prison one day, went to see his G.P. the next day, and was prescribed pregabalin, which the prison G.P. had earlier decided was not in the best interests of the patient. The same patient returned to prison a month later, with pregabalin recorded in his medical records. This underscores the difficulties involved in trying to harmonise healthcare between prison and the community. Developing and maintaining good links with community teams was emphasised as essential for minimising such potential risks.

Paradoxically, it was the opinion of at least one clinician that the chances for improvement were better if the person was serving a longer sentence. In these circumstances, there was time to put a proper recovery plan into action, as opposed to those in prison for short periods of time who were merely being 'looked after' temporarily and getting caught up in the 'recycling process' described above:

The short-term remand and fines and things, you can't do anything with those guys, you have got to keep them safe, try to reduce the risk of them taking an overdose while they are here and making sure they don't do themselves any major harm in the few months...if they're not here for a long period of time, it's very difficult. At the end of the day we are only looking after them on a temporary basis, they are all registered with G.P.s in the community so the burden and responsibility as a G.P. in the community lies in the community and the vast majority of our patients, 95% of them will come in and out of here reasonably quickly...

(Healthcare staff, Prison A)

Related to this, another suggestion proposed for easing the pressure points caused by this 'revolving door' process was the introduction of Drug Courts⁶:

... if there was a drug court type thing, because people come in here and they are actively on the abusive substances and that's why they have committed a crime so trying to actually get to the bottom of that and say how within crime can we get rid of this to try and stop you, time in prison for that is not going to help you that much. (Healthcare staff, Prison A)

As noted earlier, healthcare staff in both prisons were more likely than other participants to raise the issue of personal trauma in connection to the misuse of PDs, highlighting the extent to which traumatic experiences impacted negatively on the mental health of patients they treated. While some prisoners talked about violent traumatic incidents connected with paramilitary activity such as punishment beatings, shootings and so forth, they were less forthcoming about trauma of a personal nature. This is most likely due to the methodology and the fact that discussions were conducted via focus groups.

Almost all healthcare participants expressed the desire for a more holistic style approach to managing risk in prison. Participants in Prison A and B also expressed their frustration at what them deemed a 'vicious circle' where often mental health problems are not given priority for treatment until the patient's drug problem has been tackled. However, participants pointed out that the drug problem cannot be tackled until the mental health issues have been addressed.

What emerged in these discussions was an appreciation of the benefits of a whole person approach to treating substance misuse, which included the need for a better understanding of addiction. Greater education on addiction, mental health issues and a move towards trauma informed practices in the prison environment and in the community were suggested as priority areas, if the issue of PDs is to be successfully addressed:

It definitely is...there was a paper published in the last couple of weeks...in relation to moving away from that punishment and moving towards the trauma informed practice and how we look at that person. It's done in other countries; could we replicate this? It's probably something we should be looking at. (Healthcare staff, Prison A)

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⁶ Drug Courts are a component of Problem Solving Courts and have been introduced in many countries as a way of reducing drug-related imprisonment by offering court supervised treatment for drug dependence (UNODC, 2007). The initiative works with people whose offending behaviour is driven by alcohol or drugs misuse. International evidence suggests that this type of intensive treatment is a more effective intervention to rehabilitate offenders (CJI, 2015).

The reference here to 'trauma informed practice' is an indication of the increasing recognition of the detrimental impact of multiple adversities in childhood on health and wellbeing outcomes in later life (e.g. Bellis et al., 2015; Felitti et al., 2010; Hughes et al. 2017 – cited in Mooney and Coulter 2019). The term 'trauma informed care' is now a common approach used in health and social care, particularly among early years' practitioners. This has led to recommendations for the UK Government to draw up a new national strategy for 'evidence-based early intervention aimed at addressing childhood adversity and trauma' (HoC, 2018: 4).

As noted above, health professionals have become more aware of the mental health needs of individuals and families impacted by trauma (and transgenerational trauma) as a legacy of the Troubles – many of which use alcohol and other drugs, 'leading to high rates of comorbid mental and substance use disorders' (Commission for Victims and Survivors, 2015: 10).

SECTION FIVE – SUMMARY AND RECOMMENDATIONS

Analysis of the data revealed a number of main points. These are summarised below:

It is the perception of those who took part in this study that prescription drug use is a major issue in Northern Ireland and has increased substantially over the past three to four years. The belief is that PDs now surpass illicit drugs in terms of supply and demand. Where once NPS were in high demand, the trend has moved to one of PDs within an overall polydrug use, which carries a higher risk of overdosing and adverse consequences (HMIP, 2015).

Throughout this study, a prominent message which emerged was that the use of PDs is a reflection of society as a whole. In other words, it is not a 'prison problem', rather a challenge that confronts society in general. This brought into sharp focus the relevance of overlaying some of the more common community based advice such as going for a long walk and getting plenty of rest, onto the prison population, where such suggestions are not realistic.

Comparisons were drawn between the increased use of PDs in prison with historic patterns of prescription practices in Northern Ireland overall, particularly of sedatives in the treatment of anxiety and depression. Many participants linked high and increasing levels of PDs for mental disorders to high rates of mental health problems in Northern Ireland associated with socio-economic deprivation and the legacy of the political conflict.

Factors which repeatedly featured in discussions with all participants about the drivers of increased availability of (and demand for) PDs centred on cost, profit, evasion, suppression and quality. PDs are cheaper than traditional illicit drugs, with the emergence of the 'dark web' making them easy to obtain. PDs are easier to conceal and harder to detect as sniffer dogs are only trained to detect mostly illicit substances. Certain prescription medication is also quicker to leave the body, meaning there is less chance of being detected in a drug test. The legality of PDs was thought to offset potential consequences of being in possession, compared to more traditional illicit drugs. Greater availability of PDs makes access easier, fuels demand and is inextricably linked with motivational factors. All of these factors are reported in the wider literature.

The extent to which prescribing practices in prison was referred to during this study is an indication of how significant the issue is to all participants alike. For example, when motivations for using PDs was discussed with prisoners, the conversation more often centred around the use of PDs as a response to their prescribed medication being moderated/terminated while in jail. This was noticeably more

dominant among prisoners in Prison A than it was in Prison B. The notion of 'self-medicating' was a significant sub-theme here.

While 'self-medicating' did feature to an extent in Prison B, it was more prevalent in Prison A. This may be due to the fact that, as detailed in Table 1, participants in Prison A were part of an established group which met weekly to discuss issues related to substance use and their general day to day wellbeing. Thus, making health and wellbeing matters a prominent focus.

It was the view of some prison and healthcare staff that wide availability is also driven by prisoners' deliberate actions, both inside and outside of prison, to increase the likelihood of being prescribed certain drugs legitimately. Actions included self-harming, presenting to their community G.P. and/or prison G.P./Psychiatrist with untruthful or exaggerated conditions. This was believed to be for multiple overlapping reasons such as financial gain, for example as a door to disability benefits, to use as currency on the black market, for diversion purposes, as a result of bullying and so forth. All of which brings into question the medical grounds underpinned in prisoners' explanations for self-medicating.

Pleasure seeking *per se* did not feature strongly as a motivational factor among prisoner discussions. Rather, explanations were couched in the ability of PDs to help 'get the day in' or to 'take your mind off things'. Boredom and lack of alternative activities were among the reasons put forward for the use of PDs.

The biggest issue in terms of accessibility to PDs was thought to be medication being brought into prison from outside. Common pressure points for bringing PDs into prison was identified as during visits, prisoners coming back from home leave, prisoners returning from work outside of prison and from those who had been released and had gone on to reoffend.

The perceived safety of PDs compared to illicit drugs was a topic that emerged among all participants. Prison and healthcare staff tended to have the opinion that prisoners had less risk awareness about the adverse consequences associated with counterfeit PDs. However, discussions with prisoners revealed that was not necessarily the case, with awareness of risk being weighed against the consequences.

Reduced staffing levels were discussed by prison staff as adding to the risks involved in PD use, closely connected to this was the time pressures involved in the safe supervision of medication and the belief that medication queues offered the potential for bullying.

Among the grievances expressed by prisoners was the perceived differential medical treatment between what they received in the community from their own G.P. and the treatment received in the prison environment. At the same time, health care staff had to guard against the misuse of PDs through dishonest or exaggerated demands for treatment. Health care staff are also bound by restrictions placed on medical staff about prescribing practices in prison.

One issue which was reiterated on several occasions by all participants in the study was the matter of diversionary activities, of which increased exercise time and access to the gym were prominent, but also included cookery classes and self-development classes. The general opinion was that diversionary activities, particularly physical exercise, occupied the mind and was a positive thing.

Discussions with healthcare staff emphasised the need for greater education on addiction and the value of a holistic approach to addressing this issue, that is, understanding what benefits the person as a whole, including their mental, physical and emotional health – not just for those working in the prison estate but right across the community.

Reflecting on the findings, one of the most important points to emerge is that addressing the issue of PDs in prison cannot be undertaken in isolation. It is difficult to contemplate any resolution that does not simultaneously take into consideration the use of PDs in the wider community.

This suggests that strategies designed to encourage a community-wide holistic approach that minimises risk involved in PDs as they sit within the wider polydrug use may be more successful than other initiatives that try to deal with the situation separately. A dedicated communications network between professionals working in the prison environment and those working in the community that prioritised sharing of information and experiences - on emerging trends for instance - would be one such example.

Health care staff expressed the opinion that patients in prison do not take enough responsibility for the choices they make, consequently that responsibility is passed onto health professionals. This not only increases accountability on behalf of health staff, but frees patients from fully contemplating the consequences of their actions. This ties in with recent moves in Northern Ireland to introduce initiatives that would see prisoners being encouraged to take more responsibility for their actions through behaviour change approaches.

The meaning applied to 'risk' in the study was associated with consequence and weighing up the pros and cons of following up a line of action. This pointed to motivational factors that reflect those documented in other reports examining the issue of substance misuse in prisons such as increased availability driven by cost, profit, concealment and evasion factors (e.g. CJINI, 2018; 2016; CSJ, 2015; HMIP, 2015). Therefore, many of the recommendations made in these reports will also be relevant to

this study. However, there are some aspects of Northern Ireland society that require a slightly more nuanced approach; a better understanding of trauma (including transgenerational trauma) and its impact on drug taking behaviour is a case in point.

Recommendations

- Given the strength of the finding that the pattern of PDs practice in prison is a reflection of the wider community, it would be good practice to develop and maintain solid communication links with organisations in the community for the sharing of information on emerging local trends. This would allow the characteristics and traits of new and emerging drugs to be recognised more quickly and planning put in place for how to deal with the issue.
- In addition to other services, AD:EPT offer a pre-release session aimed at those due for release, looking at how to reduce risk when released from custody. Information and advice is provided on drugs and alcohol use and AD:EPT work with the client to prepare plans for reintegration in the community. This is a good opportunity to address the delineation that participants believe exists between treatment in prison and the community. However, future funding of the programme is uncertain and we believe the service should be adequately funded to maintain this work.
- Many prisoners expressed the desire for access to substance misuse treatment and prison staff also pointed to the lack of such facilities. On the basis of what participants told us, there should be consistent access to controlled detox facilities/mechanisms for 'step down' in place within prisons in Northern Ireland.
- All prison staff should be alert to potential situations where more vulnerable prisoners may be used to 'test out' substances by others, prior to their use.
- All participants thought diversionary activities, particularly physical activity, were positive
 ways of distracting attention from the effects of withdrawal and making up for the lack of
 controlled detox facilities. Cookery classes, personal development classes and, in particular,
 gym sessions provided on a routine basis, rather than as a privilege would be an opportunity
 to test this notion.
- Prison and healthcare staff noted an information gap between themselves and prisoners in
 'jail pharmacology'. Resourced and up-to-date training should be available for all prison staff
 who request it, to understand the symptoms and consequences of prescription and other drug
 use and how to deal with it.
- Efforts should be made to develop an integrated trauma Informed practice model in prison,
 drawing on examples that have advanced in the social care field.

References

Abel, G.A., Barclay, M.E., Payne, R.A. (2016) Adjusted indices of multiple deprivation to enable comparisons within and between constituent countries of the UK including an illustration using mortality rates. BMJ Open 6(11), e012750. (Cited in Shevlin et al. 2019).

Bellis, M. A., Ashton, K., Hughes, K., Ford, K., Bishop, J., & Paranjothy, S. (2015). Adverse childhood experiences and their impact on health-harming behaviours in the Welsh adult population. Public Health Wales, 36, 1-36.

Boys, A., Farrell, M., Bebbington, P., Brugha, T., Coid, J., Jenkins, R., Taylor, C. (2002). Drug use and initiation in prison: Results from a national prison survey in England and Wales. Addiction, 97, 1551–1560.

Bunting, B.P., Ferry, F.R., Murphy, S.D., O'Neill, S.M. and Bolton D. (2013) 'Trauma associated with civil conflict and posttraumatic stress disorder: Evidence from the Northern Ireland study of health and stress', *Journal of Traumatic Stress*, 26(1), pp. 134-141.

Butterworth, P., Rodgers, B and Windsor, T.D. (2009) Financial hardship, socio-economic position and depression: results from the PATH Through Life Survey, *Social Science and Medicine*, 69: 229-237

Centre for Justice Innovation (2015) Problem-Solving Courts: An evidence review, London: Centre for Justice Innovation

Centre for Social Justice (2015) *Drugs in Prison*. https://www.centreforsocialjustice.org.uk/library/drugs-in-prison

Commission for Victims and Survivors (2015) *Towards a Better Future: The Trans-generational Impact of the Troubles on Mental Health,* Belfast. Commission for Victims and Survivors and Ulster University.

Corkery, J., Claridge, H., Loi, B., Goodair, C. and Schifano, F. (2013) *Drug Related Deaths in the UK: January to December 2012*, London: St George's University of London.

Criminal Justice Inspectorate Northern Ireland (2016) Report on an Announced Inspection of Maghaberry Prison 4-15 January 2016 Belfast: CJINI.

Daly, M. and Kelly, G. (2015) Families and Poverty: Everyday life on a low income, Bristol: Policy Press.

Davidson, G. and Leavey, G. (2010) 'Promoting mental health in Northern Ireland: Addressing division, inequality and stigma', *Journal of Public Mental Health*, 9(4), 6-15.

Department of Health (2015) Drug Prevalence in Northern Ireland Key Facts – 2014/15. https://www.health-ni.gov.uk/news/drug-prevalence-northern-ireland-key-facts-%E2%80%93-201415

Department of Health (2018a) Statistics from the Northern Ireland Substance Misuse Database: 1st April 2016 - 31st March 2017. https://www.health-ni.gov.uk/sites/default/files/publications/health/smd-2016-17.pdf

Department of Health (2018b) Health Inequalities Annual Report 2018. https://www.health-ni.gov.uk/sites/default/files/publications/health/hscims-report-2018.pdf

Donnelly, K.J. (2014) Primary Care Prescribing, Northern Ireland Audit Office: Belfast. https://www.niauditoffice.gov.uk/files/primarycareprescribing-2pdf

European Monitoring Centre for Drugs and Drug Addiction (2002) *Annual report on the state of the drugs problem in the European Union and Norway*.

European Monitoring Centre for Drugs and Drug Addiction (2012) Prisons and Drugs in Europe: The Problems and Responses. http://www.emcdda.europa.eu/system/files/publications/747/TDSI12002ENC 399981.pdf

European Monitoring Centre for Drugs and Drug Addiction (2017) United Kingdom Country Drug Report 2017. http://www.emcdda.europa.eu/system/files/publications/4529/TD0116925ENN.pdf

European Monitoring Centre for Drugs and Drug Addiction (2018) European Drugs Report: Trends and Developments, New psychoactive substances in prison. http://www.emcdda.europa.eu/publications/rapid-communications/nps-in-prison_en

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V. & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 14(4), 245-258.

Goodhand, J. (2003) 'Enduring Disorder and Persistent Poverty: a review of the linkages between war and chronic poverty, *World Development*, 31 (3), 635.

HM Inspectorate of Prisons (2014) *HM Chief Inspector of Prisons for England and Wales: Annual report 2013–14.* London: HM Inspectorate of Prisons. https://www.justiceinspectorates.gov.uk/hmiprisons/wpcontent/uploads/sites/4/2014/10/HMIP-AR 2013-14.pdf.

HM Inspectorate of Prisons (2015) *Changing patterns of substance misuse in adult prisons and service responses*, London: HM Inspectorate of Prisons.

HM Inspectorate of Prisons (2016) *HM Chief Inspector of Prisons for England and Wales: Annual report 2015–16,* London: HM Inspectorate of Prisons. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/538854/hmipannual-report.pdf.

Higgins, K., O'Neill, N., O'Hara, L., Campbell, A., O'Neill, T., O'Neill, F. and McCann, M. (2018) *Variations and Determinants of Novel Psychoactive Substance Use -: Implications for Policy and Practice*, National Institute of Health Research Public Health Research Programme.

Health and Social Care Board (2015) http://niformulary.hscni.net/Formulary/Adult/PDF/PregabalinAndGabapentinRiskOfMisuseAdviceHS CBWebVersion.pdf

Hillyard, P., Rolston, B. and Tomlinson, M. (2005) Poverty and Conflict in Ireland: An International Perspective, Dublin: Combat Poverty Agency.

HM Inspectorate of Prisons (2015) *Changing patterns of substance misuse in adult prisons and service responses*. London: Her Majesty's Inspectorate of Prisons.

House of Commons Science and Technology Committee (2018) Evidence Based Early Intervention, Eleventh Report. https://publications.parliament.uk/pa/cm201719/cmselect/cmsctech/506/506.pdf

Home Office (2017) Drug Misuse: Findings from the 2016/17 Crime Survey for England and Wales, Statistical Bulletin 11/17, July 2017. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/642738/drug-misuse-2017-hosb1117.pdf

Kelly, C.B., Ansari, T., Rafferty, T. and Stevenson, M. (2003) Antidepressant prescribing and suicide rate in Northern Ireland, *European Psychiatry*, 18(7), 325–328.

Kolind, T. and Duke, K. (2016) Drugs in prisons: Exploring use, control, treatment and policy, Drugs: Education, Prevention and Policy, 23:2, 89-92.

Krueger, R. and Casey, M.A. (2009) *Focus Groups: A Practical Guide for Applied Research* (4th edition), London: Sage.

Lewis, J. (2003) Design Issues, in Richie and Lewis, Qualitative Research Practice, London: Sage.

Mental Health Foundation (2016), Fundamental Facts About Mental Health 2016. Mental Health Foundation: London.

Ministry of Justice (2011) The Dedicated Drug Courts Pilot Evaluation Process Study. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/217380/ddc-process-evaluation-study.pdf

Mooney, S. and Coulter, S. (2019) Family Life Stories Workbook Practitioner Guidance: Helping practitioners talk with parents about difficult times when they were young. Belfast: Queen's University Belfast.

Newton, J.N., Briggs, A.D., Murray, C.J., Dicker, D., Foreman, K.J., Wang, H., Naghavi, M, Forouzanfar, M.H., Ohno, S.L., Barber, R.M., Vos, T. (2015) Changes in health in England, with analysis by English regions and areas of deprivation, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. The Lancet 386(10010), 2257–2274. (Cited in Shevlin et al. 2019).

Northern Ireland Statistics and Research Agency (2019) Drug Related and Drug Misuse Deaths 2007 to 2017, published March 2019. https://www.nisra.gov.uk/publications/drug-related-and-drug-misuse-deaths-2007-2017

Novak, S.P., Håkansson, A., Martinez-Raga, J., Reimer, J., Krotki, K. and Varughese, S. (2016) Nonmedical use of prescription drugs in the European Union, *BMC Psychiatry*, 16:274. DOI 10.1186/s12888-016-0909-3

O'Reilly, D. and Stevenson, M. (2003) Mental health in Northern Ireland: have "the Troubles" made it worse? *Journal of Epidemiology & Community Health*, 57(7), 488–492.

Payne, S. (2005) 'Mental health, poverty and social exclusion', in Gordon, D, Levitas, R and Pantazis, C (Eds.), *Poverty and Social Exclusion in Britain: The Millennium Survey*, (pp. 285-311), Bristol: The Policy Press.

Payne, S. (2011) *Social Exclusion and Mental Health: Review of literature and existing surveys*, Working Paper – Methods Series No 15, Poverty and Social Exclusion in the UK. http://www.poverty.ac.uk/pse-research/working-papers

Payne, S. (2012) Mental Health, Poverty and Social Exclusion, Conceptual Note Number 9, Poverty and Social Exclusion in the UK. http://www.poverty.ac.uk/pse-research/pse-uk/conceptual-notes

Ralph, R., Williams, L., Askew, R. and Norton, A. (2017) Adding Spice to the Porridge: The development of a synthetic cannabinoid market in an English Prison, *International Journal of Drug Policy*, 40, pp 57-69.

RAND Europe (2017) *The role of the 'dark web' in the trade of illicit drugs*, Research Brief. https://www.rand.org/pubs/research briefs/RB9925.html

Rossman, S., & Rempel, M. (2007, July 24). Preliminary results from the Multisite Adult Drug Court Evaluation. Presented at the National Institute of Justice Annual Conference on Justice Research and Evaluation, Crystal City, VA

Royal College of General Practitioners (2011) Safer Prescribing in Prisons. https://www.rcgp.org.uk/clinical-and-research/resources/a-to-z-clinical-resources/prison-health.aspx

Shevlin, M., Rosato, M., Boyle, S., Boduszek, D. and Murphy, J. (2019) Rates and predictors of anti-depressant prescribing in Northern Ireland 2011–2015: a data linkage study using the Administrative Data Research Centre (NI), Irish Journal of Psychological Medicine, doi:10.1017/ipm.2019.14

Stafford, M., De Silva, M. Stansfield, S and Marmot, M (2008) Neighbourhood social capital and common mental disorder: testing the link in a general population sample, *Health and Place*, 14, 394-405.

Standing, G. (2011) Behavioural conditionality: why the nudges must be stopped – an opinion piece, Journal of Poverty and Social Justice, 19 (1), 27-38.

Strang, J., Gossop, M., Heuston, J., Green, J., Whitely, C., & Maden, A. (2006). Persistence of drug use during imprisonment: relationship of drug type, recency of use, and severity of dependence to heroin, cocaine, and amphetamine in prison. *Addiction*, 10, 1125–1132

Thaler, R. and Sunstein, C. (2009) *Nudge: Improving decisions about health, wealth and happiness, London:* Penguin Books.

Tomlinson, M. (2007) *The Trouble with Suicide: Mental Health, Suicide and the Northern Ireland Conflict - a review of the evidence*. Belfast: Department of Health, Social Services and Public Safety.

Tomlinson, M. (2013) *Legacies of Conflict: Evidence from the Poverty and Social Exclusion Survey 2012*, Knowledge Exchange Seminar Series, October 2013, Northern Ireland Assembly.

Tomlinson, M. (2016) Risking peace in the 'War against the Poor'? Social exclusion and the legacies of the Northern Ireland conflict, *Critical Social Policy*, 36(1), 104-123.

United Nations Office on Drugs and Crime (2007) Handbook of basic principles and promising practices on Alternatives to Imprisonment. http://www.unodc.org/pdf/criminal_justice/Handbook of Basic Principles and Promising Practices on Alternatives to Imprisonment.pdf

United Nations Office on Drugs and Crime (UNODC) (2015) *World drug report 2015*. United Nations Publication, Sales No. E.15. XI.6.

United Nations Office on Drugs and Crime (UNODC) (2017) World drug report 2017. United Nations Publication, Sales No. E.17.XI.7

Weich, S. and Lewis, G. (1998) Material standard of living, social class and the prevalence of common mental disorders, *Journal of Epidemiology and Community Health*, 52, 8-14.

Weich, S., Twigg, L and Lewis, G. (2006) Rural/non-rural differences in rates of common mental disorders in Britain: Prospective multi-level cohort study, *British Journal of Psychiatry*, 188, 51-57.

Wheatley, M. (2007), "Drugs in prison", Jewkes, Y. (Ed.), Handbook on prisons, Willan Publishing, Cullompton, pp. 399-422.

Wilkinson, R. and Pickett, K. (2009) *The Spirit Level: Why More Equal Societies Almost Always Do Better*, London: Allen Lane.

Wilkinson, R. and Pickett, K. (2018) *The Inner Level: How More Equal Societies Reduce Stress, Restore Sanity and Improve Everyone's Wellbeing*. Allen Lane, Penguin Books.

Wilson, D. B., Mitchell, O., & Mackenzie, D. L. (2006). A systematic review of drug court effects on recidivism. Journal of Experimental Criminology, 2, 459–487

Wilson, G., Montgomery, L., Houston, S., Davidson, G., Harper, C., & Faulkner, L. (2015) *Regress? React? Resolve?: An evaluation of mental health service provision in Northern Ireland.* Action Mental Health (Northern Ireland).

Wolf, K. (2017) *Detection of Drug Misuse: Biomarkers, Analytical Advances and Interpretation*, Croydon: Royal Society of Chemistry.

World Health Organisaton (2007) *Health in prisons. A WHO guide to the essentials in prison health,* WHO, Copenhagen.

Zinn, J. (2015) Towards a better understanding of risk-taking: key concepts, dimensions and perspectives, *Health, Risk & Society*, 17: 2, 99-114.

Zinn, J. and McDonald, D. (2018) Risk in the New York Times (1987 – 2014) A corpus-based exploration of sociological theories. Palgrave Macmillan.