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Evaluation of Opioid Substitution Treatment in Scotland's prisons as a COVID-19 contingency: patient experience follow-up report

HEALTH AND SOCIAL CARE

social research

Evaluation of Opioid Substitution Treatment in Scotland's prisons as a COVID-19 contingency: patient experience follow-up report.

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Contents

Key findings

- On May 1st, 2020, the Scottish Government requested that all daily oral Opioid Substitution Treatment (OST) patients in custody, who were currently serving a sentence of six months or longer, were offered the opportunity to transfer onto Buvidal, a type of Prolonged Release Buprenorphine, where clinically appropriate[1]. This was intended as a contingency measure in prisons to respond to COVID-19. The report Coronavirus (COVID-19) - Opioid Substitution Treatment (OST) in prisons: process evaluation highlighted that by August 2020, one tenth of the estimated total prison population on OST and with more than six months left in custody had moved over onto Buvidal. In addition, it found that daily OST places a considerable burden on prison operations and healthcare services and that there were a host of anticipated benefits arising from the introduction of Buvidal as treatment option for prison regimes (e.g. freeing up staff time for increased case management work), healthcare services (e.g. allow for more patient focussed activities), and patients, such as increasing engagement with purposeful activities and reductions in drug seeking behaviours.
- The use of Buvidal as an Opioid Substitution Treatment (OST) in Scotland's prisons could have transformative potential that might lead to improvements in the health and wellbeing of OST patients, prison safety and security, and improve through-care outcomes once people are released.
- The numbers of Buvidal patients in Scotland's prisons has increased – although the rate at which people switching over appears to have been influenced by uncertainty around funding for the treatment, with patients less willing to switching when healthcare staff were unsure about the longevity of the scheme.
- High levels of satisfaction about Buvidal were reported by almost all patients and healthcare staff continued to be enthusiastic about the positive impact Buvidal can have on patients' lives.
- The desire to come off methadone was a strong motivation for most Buvidal patients, who reported that they did not like how it made them feel and that methadone was a stigmatising treatment. A further motivation tied to wanting to come off methadone was that changing to Buvidal would prevent people from having to attend a community pharmacy on a daily basis after their release from prison – a setting where they felt at risk of relapse.
- Buvidal appears to alleviate cravings and reduce drug seeking behaviour, which combine to drastically reduce illicit drug use among Buvidal patients.

[1] https://www.gov.scot/publications/coronavirus-covid-19-opiate-substitution-treatment-in-prisons---chief-medical-officer-letter/

- Buvidal had positive effects on patients' health and wellbeing – patients and healthcare staff reported sometimes drastic changes to peoples' emotional wellbeing; in some cases this led to positive lifestyle changes, such as people re-engaging with purposeful activities and going to the gym.
- Buvidal may offer a route for people to escape being bullied to divert their OST prescription in prison, which has harmful impacts on patient health and safety and prison security.
- Given these findings, there is now evidence to suggest that more patients would benefit from being prescribed Buvidal, if it was offered as a treatment option to everyone entering prison with a history of opioid use
- Once people have left prison, Buvidal offers the potential for them to take greater control of their lives, free from a daily medication regime, which may allow them to source and hold down employment and take part in other positive activities, such as going on holiday, more easily.
- Buvidal, however, may not be suitable for all OST patients – concerns were raised about how some may cope with the increased cognitive clarity Buvidal patients experience compared to methadone, particularly if their drug use is tied to suppressing or coping with previous trauma. Some degree of patient discomfort should be expected when they change their OST prescription and close attention should be paid to the transition period when parents are switching from high doses of methadone.
- This study also suggests that patients mostly become stable on Buvidal after they have been given their second monthly dose. While it is currently only OST patients with a minimum of 6 months remaining on their sentence that can change their prescription to Buvidal, findings from this research suggests that this period could be shortened to potentially include people with only 3 months left on their sentence.
- From a healthcare service perspective, increasing the number of Buvidal patients would likely free up resources within prison health centres to be able to offer other services to patients, including those more focused on recovery.
- While this report noted a lack of clarity surrounding the future of Buvidal, and that this may have been a factor in patient decision making about changing their OST, the Scottish Government has since allocated £4 million for the 2021/22 financial year to encourage services that people with drug issues engage with to make Buvidal more available in prisons and the community. In addition, an expert group has been established to support this work which includes doctors, pharmacists, drug addiction specialists and lived experience members. The group is being chaired by the Interim DCMO. One of the main aims of the expert group is to work to remove existing barriers across health and social care to expedite the use of prolonged-release buprenorphine across Scotland.

1. Background and purpose of this study

1.1 Introduction

It is well known that there is a strong relationship between substance use and crime, as well as substance use and reoffending[2]. Substance use can threaten the health and safety of the people who live and work in prisons, as well as the security and stability of the prison environment. The prevalence of opioid dependence is substantially higher in prisons than in the community[3]. Opioid Substitution Treatment (OST) is the main treatment for people addicted to heroin and other opioid drugs and has been used in Scotland's prisons for approaching twenty years. OST most commonly consists of daily oral doses of methadone administered under supervision throughout the prison stay. Research has demonstrated a very strong association between receipt of OST and lowered mortality among opioid-dependent people in prison[4]. However, it carries some risks for patients including overdose and if they seek to divert their medication for illicit use by others within prisons. Diversion of prescription medication and the bullying, intimidation, and the adverse health effects associated with it are especially pertinent for OST provision in prisons. Additionally, the logistics of supervised daily dosing is burdensome for prison health centres, patients, and prison operations because it requires each individual to be taken to and from a dispensing area by Scottish Prison Service (SPS) staff and have their medication supervised by at least two NHS staff. It has been estimated that approximately 25% of people in prison in Scotland receive a daily supervised dose of OST[5]. This is resource-intensive in terms of healthcare and prison officer staff time and also has a detrimental impact on patients' daily routine, limiting their ability to participate in prison life.

Progress has been made over the last decade or so in developing new forms of treatment for opioid addiction, including prolonged release buprenorphine (PRB) injections. These provide sustained medication release at a controlled rate over the dosing interval and are thought to represent a significant development in treatment for opioid dependence. Current formulations of PRB enable weekly or monthly doses. The shift from daily to weekly or monthly dosing is expected to reduce the treatment burden for clinicians and patients, improve patient adherence, and remove the risk of diversion. Early studies of PRB show sustained reductions in illicit opioid use and good treatment retention[6]. Surveys and qualitative research

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[2] May, C., Sharma, N., & Stewart, D. (2008). *Factors linked to reoffending: a one-year follow-up of prisoners who took part in the Resettlement Surveys 2001, 2003 and 2004*. London: Ministry of Justice.

[3] Fazel et al. (2017). *Substance use disorders in prisoners: an updated systematic review and meta-regression analysis in recently incarcerated men and women*. Addiction; 112: 1725–1739.

[4] Sarah, et al. (2014). *Opioid substitution therapy as a strategy to reduce deaths in prison: retrospective cohort study*. BMJ open 4.4.

[5] Figures available at: Prisoner health - ScotPHO

[6] Nasser AF, Greenwald MK, Vince B, et al. (2016). *Sustained-Release buprenorphine (RBP-6000) blocks the effects of opioid challenge with hydromorphone in subjects with opioid use disorder*. J Clin Psychopharmacol; 36:18–26; Haight BR, Learned SM, Laffont CM, et al. (2019).

have demonstrated positive perceptions and probable benefits of PRB, including the potential for reduced stigma and negative rituals and habits, greater patient choice and flexibility, and a decreased need to frequently attend pharmacies and clinics[7].

Efficacy and safety of a monthly buprenorphine depot injection for opioid use disorder: a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. Lancet; 393:778–90; Lofwall MR, Walsh SL, Nunes EV, et al. (2018). *Weekly and monthly subcutaneous buprenorphine depot formulations vs daily sublingual buprenorphine with naloxone for treatment of opioid use disorder: a randomized clinical TrialEfficacy of subcutaneous Weekly and monthly vs daily sublingual dosing of buprenorphine for opioid use disorder*. JAMA Internal Medicine; 178:764–73.

[7] Gilman M., et al. (2018). *Current and future options for opioid use disorder: a survey assessing real-world opinion of service users on novel therapies including depot formulations of buprenorphine*. Patient Prefer Adherence; 12:2123-2129; Neale J., et al. (2018). *Implants and depot injections for treating opioid dependence: Qualitative study of people who use or have used heroin*. Drug Alcohol Dependence.;189:1–7; Tompkins C.N.E., Neale J., Strang J. (2019). *Opioid users' willingness to receive prolonged-release buprenorphine depot injections for opioid use disorder*. Journal of Substance Abuse Treatment; 104:64–71.

1.1.1 Buvidal as a COVID-19 contingency measure in Scottish prisons

On May 1st, 2020, the Scottish Government requested that all daily oral OST patients in custody, who were currently serving a sentence of six months or longer, be offered the opportunity to transfer onto Buvidal, a type of PRB, where clinically appropriate[8]. This was intended as a contingency measure in prisons to respond to COVID-19. As noted above, the daily administration of OST places a considerable burden on the SPS and those who live and work in prisons, and there were significant concerns about how daily OST could be sustained while SPS officers and prison health centre staff were also responding to the pandemic and particularly if there was a significant outbreak within a prison. To support the Buvidal programme, the Scottish Government issued National Clinical Guidance[9] and made available up to £1.9 million to support Health Boards to transition to Buvidal in prison settings as part of NHS Board Mobilisation Plans. The funding covered the cost of the medication for a four-month period from May to August 2020, which was then extended to September 2020 to accommodate the one-month lead-in time. The Scottish Government conducted a rapid evaluation of the Buvidal programme to inform decision-making beyond the initial contingency period (May - September 2020). Coronavirus (COVID-19) - Opioid Substitution Treatment (OST) in prisons was published in December 2020. Based on the outcome of this rapid evaluation report, and a review of NHS Boards' spend to date, the Scottish Government took the decision to extend financial support for NHS Boards for the cost of Buvidal in prison settings until 31 March 2021.

To ensure continuity in the administration of OST for patients and to support prison and healthcare staff during the COVID-19 pandemic, the Scottish Government worked with partners to explore OST contingency options and identified Buvidal injections as the most pandemic-appropriate PRB as an alternative to daily OST arrangements. Buvidal is fully licensed and has been approved, on a restricted basis, by the Scottish Medical Consortium (SMC) for use by NHS Scotland for the treatment of opioid dependence.

A summary of evidence about Buvidal produced by the National Institute for Health and Care Excellence in 2019 suggested that it may have a place in treating opioid dependence in people in custodial settings, where the risk of diversion and time needed for supervised consumption currently leads to challenges in supplying supervised medicines safely[10]. Recent research has documented that Buvidal may offer specific benefits for OST patients in custody because of the practical elements (i.e. not having to receive medication everyday) and the discretion of the treatment, which could lead to a reduction in bullying and intimidation encountered as a result

[8] https://www.gov.scot/publications/coronavirus-covid-19-opiate-substitution-treatment-in-prisons---chief-medical-officer-letter/

[9] Available at: https://www.gov.scot/publications/coronavirus-covid-19-clinical-guidance-on-the-use-of-buvidal-in-prisons/

[10] Available at: https://www.nice.org.uk/advice/es19/resources/opioid-dependence-buprenorphine-prolongedrelease-injection-buvidal-pdf-1158123740101

of being an OST patient[11]. The switch to Buvidal may also reduce incidences of people diverting their OST medication, which is commonly reported in prisons and is associated with bullying and drug misuse[12]. Buvidal also exerts a blocking effect when taking other opioids which means it could prevent some drug related overdoses and deaths both in prison and after a person is liberated. Although Buvidal offers no protection from the other non-opiate/opioid polypharmacy substances that are typically present in drug related deaths[13]. Offering Buvidal also increases the treatment options for people on OST in prison, thus widening patient choice. Allied to this, the guidance issued by the Scottish Government set out how people could switch back to their previous OST if they felt Buvidal was not an effective treatment option for them.

1.2 Study objectives and methods

Data-collection, analysis, and reporting for this research were undertaken in-house by Scottish Government Health and Social Care Analysis Division between December 2020 and March 2021. The previous rapid evaluation Coronavirus (COVID-19) - Opioid Substitution Treatment (OST) in prisons in 2020 had focused on Buvidal as a COVID-19 mitigation strategy, including factors related to uptake levels and impact on prison healthcare services and operations. The aim of the research presented in this report was to explore patient experience at a more granular level, now that Buvidal has been in place as a treatment option in prisons for several months. This research is based on qualitative semi-structured interviews with Buvidal patients in custody and prison healthcare staff. As this research was an extension of the previous service evaluation, the study did not need NHS Ethics approval and it was screened using the NHS Ethics decision-making tool[14]. As with the earlier study, the SPS Head of Research consented to the research. The Data Protection Impact Assessment and Scottish Government Social Research Ethics Checklist completed for the initial phase of evaluation were updated. Updates included addressing concerns around the additional potential vulnerability of female patients. Women in the criminal justice system tend to have experienced violence and victimisation at disproportionately greater rates than the general population, and the harms and traumas suffered by women in prison are often tied to drug involvement and addiction. Participant comfort and wellbeing are considerations for any social research project, but particularly so for research involving vulnerable groups. Measures to improve participant comfort and wellbeing can include

[11] Chappuy et al. (2020). *Readiness to try extended-released buprenorphine and related factors of interest: comparison between incarcerated and non-incarcerated subjects with opioid use disorder*. Under Review by *Harm Reduction* Journal. Available at: https://www.researchsquare.com/article/rs-43617/v1 .

[12] Sindicich, N., et al. (2016). *Patient Motivations, Perceptions and Experiences of Opioid Substitution Therapy in Prison. National Drug and Alcohol Research Centre*. University of New South Wales. Available at: https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/Technical%20Report%20Number%20332.pdf

[13]. Gillen, P. (2021) *Drug Deaths in Scotland: an increasingly medical problem.* Edinburgh: Royal College of Physicians of Edinburgh External Relations and Policy Department.

[14] Available at: http://www.hra-decisiontools.org.uk/ethics/

matching interviewers and respondents by age and gender. Accordingly, it was decided that any interviews with female Buvidal patients would be conducted by a female social researcher.

Prison health centres located within a single Health Board were invited to participate. This location was chosen because it was one of the earliest adopters of Buvidal, so had patients who had been taking it for several months, and because it had a mix of male and female patients. Healthcare staff were asked to approach Buvidal patients who met at least one of the following criteria: 1) they had been taking Buvidal for several months; 2) were female; 3) or were approaching release. A participant information sheet and consent form were sent with the recruitment email to prison health centres. Interviews were conducted virtually at a time that was convenient to patients and healthcare staff. Verbal consent was sought from all participants prior to the interview starting, and interviewers made it clear to participants that they could decline to answer any questions and could choose to end the interview at any time. Interviews explored patients' motivations for switching to Buvidal, benefits and drawbacks from taking Buvidal, and overall satisfaction. Interviews with patients and healthcare staff were recorded with a digital dictaphone and then transcribed. Once transcribed, interview transcripts were anonymised through the de-identification of personal information and then analysed for common themes. The processing of personal data was in line with GDPR and fully documented in the Data Protection Impact Assessment.

1.3 Study participants

For this study, fourteen interviews were undertaken between 3rd December 2020, and January 4th, 2021, with nine patients (6 men and 3 women) and five healthcare staff. Initially 18 Buvidal patients had consented to participate but eight declined to attend their interview when scheduled and one could not go ahead for security reasons. At the time of their interviews, all patients were receiving Buvidal, although we are aware of one participant who has since reverted to methadone. The following observations were made about the sample of Buvidal patients recruited for this study. However, given the small numbers, these should not be seen as representative of the larger population of Buvidal patients in Scottish prisons.

- Patients' ages ranged from mid-30s to mid-50s.
- Length of patients' opioid addiction varied, but all had been using opioids for several years and in some cases for over 20 years.
- Patients interviewed in this study had all been taking Buvidal for several months - the shortest period someone had been taking Buvidal was two months while some had been receiving it for up to six months.
- Eight of the nine patients had previously been prescribed methadone - the one patient who had not been taking methadone had developed an illicit opioid habit while in prison but had previously refused the offer of methadone.
- Patient date of liberation ranged from some being released a few days after their interviews, while others were serving life sentences.

The five healthcare staff interviewed included prison health centre managers, and nurses and addiction workers with active caseloads of Buvidal patients. The staff interviewed had a range of experience of healthcare in prisons, with most having worked in prison settings for several years. Of the staff interviewed, one had participated in the initial Buvidal research by the Scottish Government.

2. Buvidal patient experience

2.1 Overview

The interviews with Buvidal patients and healthcare staff provided in-depth, qualitative perspectives about the impact of changing their OST to Buvidal, which for most patients was from methadone to Buvidal. High levels of satisfaction were reported by almost all patients. From analysis of the interview transcripts, several themes were identified. These included 1) motivations for changing to Buvidal; 2) benefits patients experienced from changing to Buvidal; 3) concerns and drawbacks as a result of switching to Buvidal; 4) implications of Buvidal for throughcare; and 5) the future of Buvidal.

2.2 Motivations for switching to Buvidal

Most patients had been motivated to switch to Buvidal because they did not like how methadone made them feel and because they felt there was a stigma associated with it. Most patients described how they felt sluggish and emotionally closed off when taking methadone. One likened being on methadone to living like a 'zombie'. Several patients were also keen to shed the stigma they experienced as methadone patients, which was partly associated with having to stand in a queue in prison every day to receive their prescription. Whilst exploring OST patients' views about methadone was not an objective of this research, the views of Buvidal patients suggest that methadone has a poor reputation among some OST patients. An example of this was given by the one patient who started taking Buvidal but had not previously been prescribed methadone. They described how they had been using opioids illicitly in prison but resisted attempts by healthcare staff to prescribe them methadone. Such was their strength of feeling about not wanting methadone, they described how they would 'rather die than take it'.

Other motivations given by patients for switching to Buvidal were tied to life outside of prison. In this group, most patients referred to how taking Buvidal would mean that they would no longer have to attend a community pharmacy every day to receive their prescription. For some patients, this was framed as addressing a barrier to employment. However, for many interviewees, attending a pharmacy everyday was a situation where they felt at risk of relapsing into drug use. Patients described how community pharmacies were settings that brought them into contact with peers that they shared a drug taking past with or people who tried to sell them drugs. Other motivations given by several patients relating life outside of prison were that they wanted to take Buvidal as they thought it would improve relationships with their families and children – for example, one female patient hoped that Buvidal could help them regain custody of their child after they were released because they felt it would give them more stability in the community. The emphasis that some patients placed on Buvidal helping them live what they saw to be an 'ordinary lifestyle' after their release from prison suggests that they saw Buvidal as an enabling treatment.

Healthcare staff described observing broadly similar motivations among patients wanting to switch to Buvidal. However, staff also perceived several additional motivating factors. Some staff members reported that patients wanted to start taking Buvidal because they had observed positive changes in others. As one staff member described it, the ‘good word’ about Buvidal was spreading in prison. Several staff noted that the influence of peers could be especially powerful in prompting people to switch to Buvidal. They described how some patients on their caseloads who had been prescribed methadone for a long time, in some cases over 20 years, and had previously shown little interest in reducing their dose or trying to come off OST, had requested to change to Buvidal.

Healthcare staff also described motivations related to bullying and diversion. For example, several described how they were aware of some patients who had wanted to switch to Buvidal because of the pressure they were under to divert their methadone. However, it was also noted that patients were typically unwilling to disclose that they were being bullied. An example of the harmful effects that bullying to divert their OST can have on patients was given by one healthcare worker. They described how a patient had been caught attempting to divert their methadone prescription and wanted to switch to Buvidal but did not have enough time left in custody to change over. The staff member explained how this patient told them that they were being threatened on a daily basis to divert their medication and that they would be violently assaulted if they refused. This example illustrates the high stakes and danger that people in prison can face if being pressured to divert their OST. An inference from this example is that widening uptake of Buvidal could improve OST patient safety in prisons, given healthcare staff thought it would likely be impossible to divert Buvidal. A broader population safety benefit from Buvidal could also be that if diversion is prevented then there is not a controlled drug in circulation which could cause harm to others.

Healthcare staff noted that OST patients currently prescribed daily buprenorphine tablets typically did not want to change to Buvidal, despite it being the same drug in a different format, and a small number who had changed to Buvidal subsequently reverted to buprenorphine tablets. A conclusion drawn by healthcare staff was that people on daily buprenorphine tablets were involved in diverting their prescription, either due to bullying or seeking to sell it illicitly. A final observation regarding motivations relates to trends in the uptake of Buvidal. Several healthcare staff described how there had been a steady upwards trend of people deciding to switch to Buvidal once it had been introduced. However, they noted that, when the future of funding of Buvidal became less clear (i.e. prior to the Scottish Government announcement that support would be extended until the end of the 20/21 financial year), fewer people were switching to Buvidal because of uncertainty about whether they would be able to stay on it. This indicates that patients were more willing to switch to Buvidal when there was greater certainty about its future.

2.3 Benefits to patients switching OST to Buvidal

Patients described several benefits they had experienced since starting Buvidal. These included reduced cravings and usage of illicit substances, improved health, and wellbeing, and, in some cases, better relationships with families and friends in the community.

2.3.1 Addiction benefits

From an addiction perspective, most patients described how they found themselves thinking less about drugs and experienced fewer cravings. None reported using illicitly. Several patients described how drug seeking behaviour had previously dictated the pattern of their daily living – sourcing drugs was the first thing on their minds when they woke up and several described how they would seek to source other drugs illicitly inside prison after they received their methadone prescription. Most patients perceived Buvidal as a more enabling treatment than methadone, seeing Buvidal as a path to a better future and possible abstention from drugs. Healthcare staff reported a decline in illicit substance use by Buvidal patients. In those prisons that carried out drug screening on Buvidal patients, only one instance of a Buvidal patient having taken something illicitly was recorded. Healthcare staff noted that Buvidal patients exhibited fewer instances of drug seeking behaviour. For example, several described how methadone patients would regularly seek top-up doses or other forms of medication for minor ailments; one described methadone patients as ‘always wanting a wee bit more’. Whereas now these behaviours had largely ceased in patients taking Buvidal.

2.3.2 Health and wellbeing benefits

From a health and wellbeing perspective, patients described feeling more ‘normal’ and able to experience emotions since taking Buvidal. One gave an example where they found themselves becoming emotional while watching the TV, which was something that did not happen while they were taking methadone, and they perceived this change positively. This and other examples showed that Buvidal patients were more emotionally present in their lives. While this was described as a positive for most patients in this study, interviews with healthcare staff showed that the increased emotional clarity could be a drawback for others, particularly those coping with past trauma. Patients described feeling brighter, having more energy, and feeling cognitively sharper. There was a sense here that a veil had been lifted from their lives by coming off methadone. Patients spoke about how they were able to perform better at work, were taking fewer sick days, and had more energy and motivation for other activities, including going to the gym and learning the guitar. No longer being bullied for their prescription was a benefit to their lives that was only mentioned by one patient but was hailed as a positive more commonly by healthcare staff. The patient who spoke about the pressure they experienced to divert their OST prescription described diversion as a ‘major thing’ in the prison they were living in and that switching to Buvidal could make patients’ lives safer. Healthcare staff also noted that Buvidal had made a positive impact on patients’

health and wellbeing. Several described the differences they had seen in Buvidal patients was ‘remarkable’ and that Buvidal as a ‘game changer’. Staff described how Buvidal patients appeared healthier, happier, could think more clearly, and were feeling more optimistic about their future. Patients experiencing heightened clarity was thought to be particularly impactful. One staff member described how a patient said to them that taking Buvidal was “like looking at life with different eyes”. One interviewee gave examples where they were supporting Buvidal patients who had been on methadone for up to 20 years and now they had a ‘spring in their step’. As they describe more fully:

> They [Buvidal patients] look fantastic. It's like a different person… guys that have been on methadone for years, you never thought that you would have seen them in a gym. You can see them in the morning with a towel under their arms heading for the gym. On Buvidal they are starting to see a future for themselves, they are starting to see a distance from other drug users that they haven't seen before. It’s changing people's lives in a way that people have never seen before.

2.3.3 Family and relationship benefits

Patients were asked if switching to Buvidal had impacted on their relationships with other people in their lives, including family and friends in the community or those they were living alongside in prison. Of those patients who were in contact with people in the community, most felt that Buvidal had a positive impact on their relationships. Several patients described how their families were pleased they had stopped taking methadone and, like the patients themselves, had negative perceptions about methadone, whereas Buvidal was viewed more positively. Patients described how their families were less worried about them and were proud of them for starting Buvidal. When asked why this was, patients described how their families had a poor opinion of methadone and did not think it was helping them with their addiction. Several patients spoke about how they felt more communicative when interacting with their families and that they could connect more clearly with them. Examples of this included talking longer on the phone and starting to write letters. One patient described how the tone and content of the conversations they were having with people in the community had become more positive – to illustrate this, they described how they were no longer frequently asking family and friends to put money in their prison account, which they would then spend on illicit drugs.

A healthcare interviewee gave an example of the positive impact on patients’ family relationships from switching to Buvidal. They described how two Buvidal patients were set to leave custody and return to living with their families as a result of starting Buvidal. They reflected that returning to live with their families would likely not have happened if these patients were still being prescribed methadone because they had previously been unable to stabilise themselves in the community. However, not all patients reported changes in relationships with people in the community and one described that any positive change to their relationship would likely only be seen over time, due to their relationships being strained by their history of offending and drug use.

2.4 Concerns and drawbacks about switching to Buvidal

Whilst patient experience of Buvidal was almost entirely positive, some concerns and drawbacks were raised. Most of the patients interviewed and all healthcare staff described how the transition from methadone to Buvidal could be challenging, particularly if this process involved patients having to reduce their dosage of methadone beforehand. Most patients described symptoms of opiate withdrawal during the changeover to varying degrees and most reported being anxious about experiencing withdrawal before they started Buvidal. Patients said they felt well supported by healthcare staff if they struggled with the transition. The most common responses to patients experiencing withdrawal were either for them to receive a top-up injection of Buvidal or have their dosage increased. However, several staff mentioned that in some cases they felt that Buvidal patients were asking for top-up injections because of the drug-seeking behaviour that is prevalent among the OST client group and that if further medication were available to OST patients, they would likely request it, irrespective of clinical need. Almost all of the patients interviewed who experienced withdrawal symptoms noted that these abated after they received a top-up injection or had their dosage increased. And they reported feeling stable on Buvidal by the time they were into the second month. There was one exception among the patients interviewed in this study who struggled with the transition to the point where they decided to revert back to their methadone prescription, despite having received top-up injections and their Buvidal dosage increased to the maximum available.

Other side effects reported included headaches, hot flushes, and some difficulty sleeping. The experiences of Buvidal patients in this study suggests that some discomfort is to be expected during transition, particularity where people have previously been prescribed a high dose of methadone. These kinds of reactions are not unexpected, as experiencing withdrawal is part of the changeover process to Buvidal for methadone patients, who are required to reduce their dose down to a maximum of 30ml per day and then go one day without methadone before starting Buvidal. Encouragingly, though, these experiences were mostly not severe enough that patients decided to revert to methadone.

Healthcare staff cited several concerns raised by patients prior to starting Buvidal. Most noted that patients had worries about the changeover process, particularly about whether they would experience withdrawal. Other concerns included the newness of the treatment and about how Buvidal worked, with patients voicing concerns that it would ‘run out’ and they would start to experience withdrawal. Staff described how this apprehension led to some patients becoming anxious in the days before their next injection was due. Staff also described how some patients were uneasy about the new sense of clarity they would experience when taking Buvidal, particularly if their drug use were related to a suppressing/coping strategy for past traumas. Staff described that this was a factor considered in early discussions with prospective Buvidal patients and could lead to some patients being advised not to change to Buvidal until their mental health was more stable. In some cases, healthcare staff described how patients’ concerns about the

changeover period were based on how they had seen others struggle. In response, however, staff noted that patients were reassured by seeing that most patients did become stable on Buvidal. Added to which, healthcare staff were now more knowledgeable about the difficulties people could face and were better able to support them and make the transition smoother. Other patient concerns reported by healthcare staff included the continuity of their prescription and whether they would be able to access Buvidal once they left prison. From a mental health perspective, staff noted that some patients struggled with the clarity that Buvidal provides, to varying degrees. Mostly this was the result of people having to cope with past traumas that they were now more aware of. The effects of these varied, but in one case, the effect was particularly severe, and the patient attempted suicide.

2.5 Patient satisfaction

Patients were asked whether Buvidal had met their expectations, if they had any, and whether they were satisfied with Buvidal. While most patients did not have a concrete sense of what starting Buvidal would mean for them, and in some cases, they thought it would be 'just another drug' or 'like methadone', most described how Buvidal had exceeded any expectations they had. A common theme was that patients had not expected such positive changes to how they felt. Consequently, almost all of them described feeling very satisfied with Buvidal. As evidence of their satisfaction, several described how they had been encouraging other OST patients in prison to change. Allied to this, several spoke about how they felt that being able to share their experiences would help others to make the decision to change.

2.6 Buvidal and throughcare

As noted above, several patients cited anticipated changes to their lives after leaving prison as a reason to change to Buvidal. These included not having to attend a chemist daily, regaining custody of their children, and being more able to look for or hold down employment. Healthcare staff were also asked to reflect on the implications of Buvidal for patients once they returned to the community. Their main observation was that accessing Buvidal in the community was now easier than it had been when it was first offered to OST patients in prison. According to several healthcare staff, when Buvidal was first prescribed to OST patients in prison there had been some initial uncertainty about whether they would be able to continue to receive their prescription in the community. In some instances this had led to some patients having to transfer back to methadone because Buvidal was not available in their home Health Board. This was felt to be a negative outcome for the patients affected. However, several healthcare staff described how firmer links were now in place with community prescribers and Buvidal patients could now continue to receive their prescription after their release.

Implications of Buvidal for the transition from custody to community were viewed by all healthcare interviewees as positive. Several described how being on Buvidal had alleviated some of the anxiety experienced during their release, as patients often had a list of things to arrange and, in many cases, these would have to wait until their methadone prescription had been arranged. One healthcare interviewee

described how methadone patients could become panicky about release and this could lead to them delaying other commitments until they had their prescription arranged. One staff member described how Buvidal would lessen the challenges associated with release on a Friday, when there is heightened pressure to have arrangements in place ahead of services being closed or only offering limited support over the weekend. Like most patients, healthcare staff also saw benefits to not having to attend a chemist on a daily basis as it would keep them away from a 'scene' that could trigger relapse into using illicitly.

2.6.1 The future of Buvidal as an OST in Scotland's prisons

The final question to healthcare staff was whether they were aware of, or had any plans for, the future of Buvidal once Scottish Government support ends at the conclusion of the 20/21 financial year. From a patient perspective, several healthcare staff were in the process of establishing Buvidal peer groups so that patients could share their experiences. Given the success attributed to word of mouth as a way of promoting Buvidal among OST patients, this was felt to be an important step. Regarding the future of Buvidal, staff were mostly uncertain about what was happening with funding in the longer term. Several described how they had been told not to commence any new Buvidal patients after the end of 2020 and, while funding would remain in place for those patients to be maintained on their prescription, there had been no announcements about whether their health board would resume offering Buvidal to new patients in the new financial year. Whilst several staff highlighted that Buvidal could demonstrate cost savings across a host of areas, they felt that the higher cost of Buvidal per dose compared to methadone would likely be a factor in determining whether Health Boards decided to fund the treatment. Staff opinions on the uncertain future of Buvidal as an OST for people in prison reflected a mixture of resignation and frustration. Several questioned the ethics of offering one form of treatment to some OST patients while denying it to others. As one observed, 'If it was to come to an end due to funding, I think it would be a sad thing'.

3. Discussion

Substance use is a significant issue in Scotland's prisons, affecting the health and wellbeing of the people who live and work in these settings, along with impacting on regime stability and security. There is also a strong relationship between substance use and crime, as well as substance use and reoffending. The introduction of Buvidal as a treatment option for OST patients in Scottish prisons was accelerated by the COVID-19 pandemic. The purpose of this study was to gather more in-depth data about Buvidal patient experience, which had not been feasible during previous research about Buvidal by the Scottish Government. This research involved semi-structured interviews with male and female Buvidal patients and healthcare staff in prisons within one health board. The findings from this research are now discussed in the context of the previous Scottish Government research on Buvidal and with reference to the now burgeoning literature on PRB, where relevant.

3.1 The transformative potential of Buvidal

This research demonstrated a continued sense of enthusiasm about Buvidal among patients and healthcare staff. If funding were to be provided for Buvidal by Health Boards in the longer-term, the prospect of which is currently uncertain, it is likely that more OST patients in Scottish prisons would switch to Buvidal. By interviewing a larger sample of both male and female Buvidal patients who had been taking Buvidal for several months, there is now greater evidence of first-hand patient experience. As with the previous Scottish Government research, the findings from this research present an encouraging picture of the efficacy of Buvidal as an OST in prisons. Evidence suggests it offers a host of positive lifestyle and health and wellbeing benefits. Indeed, given the spectrum of impacts, Buvidal could have transformative potential as a treatment for opioid dependence in prison. Given these findings, there is now evidence to suggest that more patients would benefit from being prescribed Buvidal, if it was offered as a treatment option to everyone entering prison with a history of opioid use. To support the growth in numbers of Buvidal patients in prison, it was encouraging to note that there are plans for the formation of voluntary Buvidal peer-support groups in prisons, which could be an important facilitator to widening uptake. The sharing of knowledge, experiences, and coping strategies in such groups may be particularly important for patients who struggle with the transition from methadone to Buvidal. Moreover, the process of giving and receiving nonprofessional, nonclinical assistance between individuals with similar conditions or circumstances has been shown to benefit people with substance use disorders

Regarding the social harms caused by opioid addiction, it is encouraging that this research found that OST patients who had been on methadone for many years, and seemingly had a history of stalled progress towards abstinence or recovery, saw positive changes to their lives within a few months of starting Buvidal. This research indicates that methadone was undermining the quality of life of some OST patients in prison. As an alternative, Buvidal would appear to 'lift the veil' of

suppressed emotions, cognitive impairment, and stigma that many patients reported experiencing when taking methadone. Shedding stigma may have important implications for reoffending outcomes. Desistance can be aided by people avoiding or shedding labels that can stigmatise and fix them in their past (e.g. as an 'offender', 'prisoner', or an 'addict'). Providing opportunities for people to take on new roles, perhaps as a jobseeker, peer-supporters in a therapeutic group, or as a person on the road to recovery, could prompt identity change that research has linked to desisting from offending and the recovery process[15]. The findings from this report may be particularly impactful given that drug related deaths are a major cause of mortality among people who have been in prison, particularly immediately following their release[16], and considering the recent increases in drug related deaths in Scotland. A need for action to address the vulnerability of people leaving prison to overdose and death in the period immediately following liberation has been acknowledged as a key priority by the Drug Death Task Force set up by the Scottish Government, which has highlighted the importance of continuity of OST provision and providing Naloxone kits to people leaving prison with a history of substance abuse as preventative measures[17].

This research, although focused on people in prison, provides evidence to suggest that wider prescribing of Buvidal could improve outcomes for people leaving prison in the community, including protection from opioid overdose and other harms associated with substance use, improved relationships with families, and as a facilitator to employment and lifestyle stability. Notably, one of the main motivations for patients switching to Buvidal was to help them avoid attending community pharmacies on a daily basis. These are settings where Buvidal patients reported feeling stigmatised and vulnerable owing to an increased risk of opportunistic drug use via contact with drug-using associates. Switching from a daily to monthly attendance would substantially reduce exposure to these risky settings and may contribute to a reduction in opioid overdose and drug related offending. Removing the need for daily attendance at a community pharmacy would also afford people greater power and freedom to shape the course of their lives. This could lead to them being able to do many of the activities other people take for granted but can be challenging when tied to a daily supervised medication regime, such as going on holiday or holding down employment.

Indications of the potential for Buvidal to impact the lives of OST patients in the community in Scotland has been shown in the results of several small-scale pilot projects. For example, a community addiction service in West Lothian reported high patient retention rates and noted that clarity of mind had not been a barrier,

[15] Best, D., Irving, J., & Albertson, K. (2017). *Recovery and desistance: what the emerging recovery movement in the alcohol and drug area can learn from models of desistance from offending*. Addiction Research & Theory, *25*(1), 1-10.

[16] Graham L., et al, (2015). *Understanding extreme mortality among prisoners: a national cohort study in Scotland using data linkage*. European Journal of Public Health; 25(5), 879–885.

[17] https://www.gov.scot/publications/drug-deaths-taskforce-covid-19-recommendations--16-april-2020/

including among patients with personality disorders[18]. Experience from a community pilot of Buvidal in Glasgow[19] highlighted that it may be of particular value to patients starting OST for the first time, those who are frequently remanded in custody, patients progressing in their recovery, and patients who feel stigmatised by their current OST. However, while the findings from these pilots and the research in this paper are encouraging, the evidence base for Buvidal would benefit from further research.

Considerations for future areas to focus on or approaches could include longitudinal studies which follow a cohort of Buvidal patients while they are in prison and then into the community following liberation. This research could explore outcomes related to drug use over time, employment, reoffending and desistance, and other benefits, including health and wellbeing, engagement in purposeful activities and changes in identity and relationships with family or friends. From a prison perspective, studies could explore variations within the population receiving Buvidal in Scottish prisons. For example, further research may determine insights related to sex, age, ethnicity, education, and recovery status. Additionally, further research could explore the impact of wider prescribing of Buvidal on safety and security within Scotland's prison by assessing impact on levels of diversion, bullying, and consumption of illicit substances. Lastly, further research within prisons could consider the role for additional mental health support to offset some of the limitations of Buvidal for patients within struggling with past trauma, particularly among female Buvidal patients.

Unlike the first piece of research by the Scottish Government, which only spoke with male Buvidal patients, this research interviewed several female Buvidal patients, who mostly described improvements to their health and wellbeing. Opioid dependent women in prison are understood to be a particularly vulnerable group, whose trajectory into custody is often associated with their drug use and, in many cases, is tied to past abuse and trauma[20]. Buvidal as a pathway to recovery may well reduce the specific criminogenic and other drug related harms women in prison experience. Previous studies have found that women in prison tend to repeatedly return to custody after serving short sentences and drug use is strongly associated with women being reconvicted after liberation[21]. Other notable findings in this research included how one female participant hoped that Buvidal could help them regain custody of their children and several women were returning to live with their families. While precise figures are not available, data from the Scottish Prisoners Survey shows that two thirds of imprisoned women in Scotland self-report as

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[18] Data from presentation given by Buvidal West Lothian Community Addictions Service presented at Drugs Research Network Scotland '*Knowledge Exchange Event: Long-Acting Injectable Buprenorphine*', 27th January, 2021.

19 Pilot report Greater Glasgow & Clyde: NHS GGC Alcohol Drug Recovery Services. Presentation at Drugs Research Network Scotland seminar: presented at Drugs Research Network Scotland '*Knowledge Exchange Event: Long-Acting Injectable Buprenorphine*', 27th January 2021.

[20] Loucks, N. (2010) "*Women in prison*." In *Forensic Psychology*. Adler, R, J., & Gray, M, J. (eds). P. 142-158. Abingdon: Willan Publishing.

[21] Light et a., (2013). *Gender differences in substance misuse and mental health amongst prisoners. Results from the Surveying Prisoner Crime Reduction (SPCR) longitudinal cohort study of prisoners*. London: Ministry of Justice.

having children and, while nearly half of mothers in prison reported in the survey that they would be involved in caring for any of their children after they leave prison, one quarter were unsure[22]. Buvidal, and the potentially more stable lifestyle it offers, may lead to women in custody who are uncertain about future involvement in the care of their children post-release becoming more involved. Additionally, key factors women attribute to their desistence is concern about the impact of their offending on their children[23]. In terms of family relationships more broadly, evidence also suggests that women's relationships (with parents, partners, peers etc.) are key to desistence[24].However, although Buvidal may potentially contribute towards desistence and improved family relationships, potential benefits could be limited because Buvidal may not be suitable for OST patients with acute mental health needs, as noted in section 3. In particular, Buvidal may not be suitable where substance misuse is related to suppressing past trauma, because of the heightened cognitive and emotional clarity compared to methadone, and as noted above, opioid dependent women in prison have often experienced abuse and trauma. This issue may be particularly relevant to Scotland's female prison population as a higher proportion of women in prison are opioid dependent compared to the male population and the drivers of their addiction and pathways into offending and prison are often quite different.

Aside from benefits to OST patients, there is potential for Buvidal to also have a transformative effect on prison regimes, security, and health care services by lightening the considerable burden of administering daily OST. It was noted in the The Scottish Government's initial research on Buvidal suggested that administering daily OST in Scotland's prisons clogged up the prison day, with dispensing taking up a considerable proportion of staff resources and time and prevented people from participating more fully in prison life as a result of not being able to start activities until after they received their OST prescription. Reducing the burden OST places on prison operations could allow people to engage more fully with purposeful activities and give operational staff more time to focus on case management support. From a security perspective, Buvidal appears to lessen the desire among patients to use additional opioids or other substances. The sourcing and consumption of illicit substances or diverted prescription medication within prisons is associated with a range of negative factors – including the spread of disease and fuelling an illicit economy that is often supported via smuggling, bullying and intimidation, and violence. Previous research highlights that decisions about OST treatment options in prisons require careful balancing between issues of treatment effectiveness with concerns of prescription diversion and misuse[i]. Buvidal appears to offer considerable treatment benefits while reducing concerns about diversion and misuse. However, the impact of wider Buvidal prescribing on the flow and

[22] The Scottish Government (2015) *International Review of Custodial Models for Women: Key Messages for Scotland*. Edinburgh: The Scottish Government.

[23] The Scottish Government (2015) *What Works to Reduce Reoffending: A Summary of the Evidence.* Edinburgh: The Scottish Government.

[24] McIvor, G., Trotter, C., Sheehan, R. (2009). *Women, resettlement and desistance*. Probation journal; 56(4): 347-361; Barry, M. (2007) 'The Transitional Pathways of Young Female Offenders: Towards a Non-Offending Lifestyle', in Sheehan, R., McIvor, G., Trotter, C. (eds) *What Works with Women Offenders*. Cullompton: Willan Publishing.

consumption of illicit substances and diverted prescription medication will likely only be more fully understood over the longer term and once prisons resume their normal regimes. From a healthcare perspective, increasing the number of Buvidal patients would likely free up resources within prison health centres, which may increase nursing time for patient facing activities[ii].

3.2 The limits of Buvidal

Despite the evidence in this study demonstrating the positive impacts of Buvidal, it should not be seen as a panacea for the many challenges facing opioid-dependent people in prison. This research highlighted some important limitations of Buvidal and demonstrated that it may not be an appropriate treatment option for all OST patients in prison. Methadone and Buvidal are pharmacologically distinct treatments which exert effects on patients. As a partial agonist, Buvidal patients typically experience heightened cognitive and emotional clarity compared to methadone. As shown in this research, this may be a significant drawback for some, especially those whose opioid use is associated with suppressing or coping with past trauma. It was common for patients to struggle with withdrawal symptoms during the changeover from methadone to Buvidal, particularly those with a treatment history of higher doses of methadone. The example of the patient who attempted suicide highlights the potentially serious impact of increased cognitive and emotional clarity for some. While mitigations such as top-up injections of Buvidal and/or increasing dosage mostly alleviated the discomforts experienced, patient experiences highlight the importance of implementing transition strategies, particularly for high dose methadone patients. However, this study also suggests that patients mostly become stable on Buvidal after they have been given their second monthly dose. While it is currently only OST patients with a minimum of 6 months remaining on their sentence that can change their prescription to Buvidal, findings from this research suggests that this period could be shortened to potentially include people with only 3 months left on their sentence.

3.3 The uncertain future of Buvidal

The findings from this research demonstrated uncertainty among healthcare staff about the future of Buvidal within their Health Board, with no firm understanding about future funding once support from the Scottish Government ended in March 2021. Staff indicated that, although existing Buvidal patients would be retained on their prescription, funding may well be the issue that dictates the future of Buvidal in custody. The apparent absense of any further roll out of Buvidal was a source of disappointment to healthcare staff. Maintaining existing patients on Buvidal and not offering it to other would lead introducing a multi-tiered approach to OST in Scotland's prisons, where one form of treatment is closed off to some patients who may wish to change their OST. This would appear incongruent with the encouraging evidence from this and the Scottish Government's prior study about the positive impacts associated with Buvidal for patients, SPS, and prison healthcare staff and services. Additionally, not offering Buvidal limits patient choice and risks keeping some OST patients on a treatment (e.g. methadone) they are dissatisfied with, creates stigma and self-stigma, exposes them to bullying and

threats of violence, and does not reduce their consumption of other drugs, either in prison or the community. Moreover, while this research did not explore potential economic benefits, several economic analyses have found that wider prescribing of PRB, such as Buvidal, could lead to reduced long-term costs for providing OST and wider savings across healthcare and criminal justice systems[25].

[25] Wright, Nat, et al. (2020) *OUD Care Service Improvement with Prolonged-release Buprenorphine in Prisons: Cost Estimation Analysis*. Clinicoeconomics and Outcomes Research: CEOR 12: 499; Phillips-Jackson, Helen, et al. (2020). *Budget impact analysis of the introduction of injectable prolonged-release buprenorphine on opioid use disorder care resource requirements*. ClinicoEconomics and Outcomes Research; CEOR 12: 233.

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The views expressed in this report are those of the researcher and do not necessarily represent those of the Scottish Government or Scottish Ministers.

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