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PERSPECTIVE PIECE

Response of tertiary addictions services to opioid dependence during the COVID-19 pandemic

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The emergence of the COVID-19 pandemic has presented the addiction services with an unprecedented set of challenges. Opioid users are particularly vulnerable because of their high level of pre-existing health problems and lifestyle factors. In order to minimise their risks to self and to others in the current Covid-19 crisis, addiction services sought to urgently identify vulnerable individuals, and induct them into opioid substitution treatment (OST) promptly. Additionally, several guidelines were created and regularly updated by the health and safety executive (HSE) for any healthcare staff working with opioid users. These include guidance documents, to facilitate prompt induction of patients onto the OST programme, the prescribing of naloxone to all patients at risk of overdose, eConsultation, medication management for those in self-isolation, and the delivery of injecting equipment. The guidance documents and resources will provide a template for a new way of working for the sector during these challenging times and into the future.

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Introduction

The national drug and alcohol strategy for Ireland was published in 2017 and entitled 'Reducing Harm, Supporting Recovery: a health led response to drug and alcohol use in Ireland 2017–2025' (Appendix 1). This sets out a framework for the development of services over this time period and contained within it is a strong emphasis on a harm reduction approach towards problematic drug use, and towards opioid dependence. In common with other European countries, this harm reduction approach encompasses key elements such as opioid substitution treatment (OST), needle exchange provision, outreach services, and prescribing of naloxone to reverse opioid overdose. The prescribing of OST in Ireland is controlled under legislation specifically, the Misuse of Drugs (Supervision of prescription and supply of methadone and medicinal products containing buprenorphine authorised for Opioid Substitution Treatment) Regulations 2017. These regulations are supported practically by the health and safety executive (HSE) clinical guidelines for opioid substitutions (OST Guidelines, 2016, Appendix 1) which give advice on the safe prescribing and provision of OST in both specialised clinic and community care settings.

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The emergence of the COVID-19 pandemic has presented the addiction services with an unprecedented set of challenges. This paper describes the responses developed to deal with the vulnerable population who are in receipt of OST.

Challenges of OST maintenance during COVID-19 pandemic

People who use drugs (PWUD) face the same risks as the general population, however due to lifestyle, conditioned behaviour, social circumstances and a high level of physical and psychological co morbidity they face several additional risks in the current pandemic.

Europe's ageing cohort of opioid users is particularly vulnerable because of their high level of pre-existing health problems and lifestyle factors. During this pandemic, we have seen underlying pre-existing conditions being a major factor in incidences of morbidity and mortality; this is particularly relevant in the OST population. The prevalence of chronic obstructive pulmonary diseases (COPD) and asthma are high among clients in drug treatment, where the smoking of heroin or crack cocaine can be an aggravating factor (Palmer et al. 2012). There is also a high incidence of cardiovascular disease among patients injecting drugs and people using cocaine (Thylstrup et al. 2015). The rise in the use of methamphetamine has also become a concern due to its constriction of the blood vessels, which can contribute to pulmonary damage. The prevalence

of HIV, viral hepatitis infections and liver cancers – leading to weakened immune systems – is high among people who inject drugs. In addition, it has been found that long term opioid use can considerably compromise one's immune system directly (Sacerdote, 2006). Tobacco smoking and nicotine dependence are also quite common among some groups of PWUD and may increase the risk of experiencing more negative outcomes if the individual contracts a virus that also compromises respiratory function.

Crowded environments increase the risk of exposure to COVID-19. Recreational drug use often takes place within settings in which individuals congregate together and drugs or drug equipment may be shared, this is particularly evident within our overcrowded homeless accommodation (EMCDDA, 2020). Drug treatment centres, low-threshold services, and social support services for people who use drugs may have areas where social distancing is difficult, such as waiting rooms or community facilities. PWUD experiencing homelessness often have no alternative but to spend time in public spaces and lack access to resources for personal hygiene. In order to prevent the client from contracting the COVID-19 infection, it has been suggested that clinics in epidemic areas could carry out 'take-home dosing plan' based on special provisions for high- and low-risk patients and patients with disabilities (Matusow et al. 2018).

As we know, the sharing of injecting material increases the risk of infection with blood-borne viruses, such as HIV and viral hepatitis B and C. Now we have the new challenge of contamination with COVID-19 through the sharing of cannabis joints, cigarettes, vaping, inhalation devices, or other drug paraphernalia (EMCDDA, 2020).

The disruption in access to drug services, clean drug-using equipment, and vital medical supplies has been a challenge in the face of staff shortages, self-isolation and restrictions placed on free movement. Travel restrictions on movement in some localities due to Covid-19 has also led to the disruption of drug markets and a reduced supply of illicit drugs. Due to complications with Afghanistan poppy cultivation, there was a heroin shortage in Ireland and several EU countries in 2010. An EMCDDA trends potter study at that time noted replacements 'filling a vacuum' on the illicit drug market. People who used heroin were turning to alcohol and benzodiazepine use as well as the use of stimulants such as crack cocaine and cathinone type substances that were new to the market at that time (EMCDDA, 2011). In the current pandemic, the risk of overdose in this population was a particular concern given that the respiratory depression associated with an opioid overdose may be exacerbated by COVID-19 infection compromising lung function.

Response to crisis: rapid response and additional resources

Since the start of this pandemic several guidelines have been created and regularly updated by the HSE for any healthcare staff working with PWUD, including a specific guidance document on OST (OST Contingency 2020, Appendix 1). This guidance document was created to address several concerns regarding ongoing clinical practice considering social distancing and various societal restrictions. They include:

- Assessing those clients not on OST currently and who need to be commenced rapidly.
- Provision of naloxone for new and existing clients.
- Management of clients who may be rough sleeping or using one-night only accommodation, hostels, B&Bs, and hotels and may not be able to self-isolate if required.
- Assessing the risk to clients who may be stockpiling drugs, therefore increasing risk of overdose.
- Assessing the risk to clients who may be self-isolating and using illicit drugs alone, therefore increasing risk of overdose.
- Dual diagnosis clients (coexisting Addiction and Mental Health problems) who may find isolation and quarantine intolerable and may have difficulty co-operating with public health advice.
- Helping clients who may not have sufficient access to clean injecting equipment due to limited access to needle exchange or due to isolation (OST Contingency 2020, Appendix 1).

In order to minimise their risks to self and to others in the current Covid-19 crisis, the service sought to urgently identify opioid dependent homeless people and others on waiting lists for OST with the aim to get all clients awaiting OST into treatment promptly. Addiction services also directed that all prescribing locations including Level 1 and Level 2 GPs gather up-to-date contact details, dose details and dispensing clinic/pharmacy details for all clients on OST in order to facilitate continuity of care in the event of a service closing unexpectedly due to staff shortages or COVID-19 restrictions (OST Contingency 2020, Appendix 1).

Induction of new clients on OST during COVID-19

In order to facilitate prompt induction of patients onto the OST programme, the guideline advises clinicians to assess and accept patients quickly into treatment. This includes people who are new to the service and those with known opioid dependence through previous engagement with the service (OST Contingency 2020, Appendix 1). OST is provided either using methadone

or buprenorphine-based products. In Ireland, the preparation of buprenorphine recommended is a combination of buprenorphine and naloxone in a 4:1 ratio. To facilitate a rapid induction, the contingency document outlined the pros and cons for each product and noted that buprenorphine may be the preferred product in clinic settings due to a more rapid induction process and a lower risk of overdose. Another concern identified in the cohort on OST was the issue of polysubstance use including benzodiazepines and alcohol. The concern was that if individuals with an additional benzodiazepine or alcohol problem were required to self-isolate, they would have experienced grave difficulty in complying with the recommendations and may even be at risk of withdrawal seizures (OST Contingency 2020, Appendix 1). Therefore, the OST guidance document contained clear, evidenced based advice about the short-term prescription of a benzodiazepine maintenance dosing regimen and advice on the provision of a community-based alcohol detoxification.

Clinical review is important and can now take place via video link or on a smartphone. A guidance document on eConsultation was produced to allow for reviewing patients and was made available to clinicians (eConsultation 2020, Appendix 1). Where a clinician is unsure about the safety of commencing OST, they can contact the local GP coordinator (GP with extensive training and experience working in Addiction services, employed by the HSE to support and advise Addiction Clinics and community GPs in matters associated with OST) for further advice. In addition, the guidance document on OST advises the prescribing of naloxone to all patients at risk of overdose. Naloxone is a medicine recommended by the World Health Organisation for treatment in opioid overdose cases to reverse the effects of overdose/respiratory depression. This guidance was supplemented with a resource leaflet/poster highlighting the dangers and risks of overdose in the current pandemic. This resource was distributed widely in community addiction services, to community pharmacies and provided directly to clients on attendance (Overdose Awareness and Coronavirus, 2020, Appendix 1).

OST for clients in isolation

For those patients undergoing a period of isolation the addiction services have set in place several options to maintain the continuity of care for that patient. A medication management resource specifically targeted at PWUD who must enter self-isolation units was developed with advice for staff manning the unit, staff in Addiction services and service users (Harnedy, 2020).

Provision of take away doses for the duration (or part) of the self-isolation should be facilitated with medication dispensed to a responsible family member or a key worker following consent from the client (OST Contingency 2020, Appendix 1). The service has also acknowledged the fact that many of the clients live alone and do not have an appropriate individual available to collect medication, in these cases a delivery system has been established utilising staff from the HSE or community based voluntary services. This provides a challenge regarding the staff member maintaining social distancing, and identification that the correct person is receiving the medication. In these cases, the client is informed in advance that a photograph will be taken using a mobile phone by the person delivering the medication to ensure the correct person is receiving the medication and avoid the need for a signature for receipt of same. Informed consent is provided for this process to occur.

For those patients who had to store a large quantity of medication at home, advice regarding the safe and secure storage of medication was provided and this includes the HSE leaflets on storage of methadone highlighting the risks of take-out doses for other residents, including children. A specifically revised document in relation to the safety of all take home medication, in particular methadone, was produced for distribution to each new person commenced on OST during the current crisis (Methadone Take Home Leaflet, 2020, Appendix 1).

Needle exchange

There had been in place an existing network of needle exchange programmes including static services, 'backpacking' (outreach model where the needle exchange is brought to an area by trained Outreach Workers and clients link in with the worker) initiatives and a pharmacy needle exchange programme involving 96 pharmacies across the country. However, due to the introduction of social distancing and travel restrictions, access to sterile injecting equipment was jeopardised, resulting in concern that this could lead to sharing of injecting equipment and the subsequent transmission of viral illness. The service had previous experience of a spike in HIV transmission in a population of mainly homeless PWUD in 2014–2015 associated with the use of 'snow-blow' (Giese et al. 2015) so contingency mechanisms were quickly established utilising responses developed at that time. This included an information resource for services about the risks of sharing equipment in the current crisis (delivered to all services and homeless hostels/isolation hubs) and a new guidance document on delivery of injecting equipment to a specific location ensuring through mobile phone and visual contact that the injecting paraphernalia was delivered to the correct

individual. An individual could call the Addiction Service, speak to a keyworker and arrange for delivery of clean equipment, (Needle Exchange Provision in Covid 19 Pandemic, 2020, Appendix 1).

Video conferencing advice

Due to social distancing restrictions and the use of quarantine, clinical review by video has been facilitated at this time in the dual interest of best practice and a pragmatic approach. Being quite a new method of interaction with patients, the service has issued an additional guideline to assist clinicians. This guidance document on remote consultation advises clinicians to use a secure form of communication, identify the correct patient through the provision of DOB and address, and to identify themselves in their specific clinical role. Confidentiality is also of consideration during the review, reassuring the patient that you are in a room alone in order to protect their privacy and that the interaction is not being recorded or streamed, also reminding the patient of the importance of privacy and confidentiality in their location as well as yours (eConsultation, 2020 Appendix 1).

Guidance/Legislation

In response to the outbreak of Covid-19, temporary amendments to the 'Medicinal Products (Prescription and Control of Supply) Regulations 2003 and the Misuse of Drugs Regulations 2017' have been made by the Minister for Health. These were designed to ensure that patients can continue to access their regular medicines during the ongoing emergency and to assist in easing the additional burdens on prescribers and pharmacists arising from the pandemic. The new regulations permit the electronic transfer of prescriptions via healthmail between GP surgeries and pharmacies thereby removing the need for a paper equivalent to be handed in or posted. This includes prescriptions provided for OST. Provision for the emergency supply of 5 days for controlled drugs under schedules 2, 3, and 4 was also introduced.

One further barrier to commencing individuals on OST was addressed when the HSE in conjunction with the Primary Care Reimbursement Service (PCRS) agreed to the temporary removal of the cap on numbers for those level 2 GPs prescribing OST in the community who responded to the COVID-19 crisis by taking on additional patients. This meant that in those practices where GPs were at their maximum allowed limit, they could continue to induct individuals onto treatment beyond their limit for the duration of the crisis.

Overdose risk

The increased risk of overdose as outlined already, necessitated placing a strong emphasis on the provision of naloxone to as many at risk individuals as possible including all those commencing on OST given the fact that induction onto methadone is recognised as an at-risk period in terms of overdose (Durand et al. 2020). The OST guidance document highlighted this and in order to ensure that finance was not a barrier to access, the HSE addiction service undertook to deliver naloxone to those GPs who expressed a willingness to prescribe. An overdose awareness document was produced for all addiction services staff to help identify those at individuals at risk and help them access this life saving medication.

OST services continuity

The introduction of the range of resources discussed above and outlined below in a short period of time had a profound effect on the ability of the service to respond to the needs of PWUD during the current COVID-19 pandemic. The principle aims of the service at the outset were to ensure continuity of OST for those individuals already on treatment, to induct all those people identified as opioid dependent, whether on an existing waiting list or not, onto OST as quickly and safely as possible and to minimise the risks to this population in terms of overdose and viral transmission.

At this early stage there is no evidence from recorded data that individuals have not been able to access their OST during COVID-19. Delivery services have been set up in every area of the country to ensure continuity of OST and services working together both from the statutory and community and Voluntary sector have co-ordinated and consolidated resources to ensure that this happened. The number of people in receipt of methadone has increased by 702 (7% increase) while the number of people in receipt of the buprenorphine/naloxone medication has increased by 161 (61% increase) perhaps reflecting the relative ease of induction for this product. The total increase in people who are receiving OST during 2020 is 863 or, over 8% more people attending than at the end of 2019. This increase was absorbed by existing services at considerable stress.

Conclusion

There has been a substantial increase in the numbers of people attending for opioid substitution treatment as a result of the responses provided by addiction services during the COVID-19 pandemic. A population

identified as being at risk at the outset of the pandemic have been successfully engaged in treatment through a concerted effort by staff and the rapid production of guidance documents and resources to support this work. This new cohort will require additional measures to be developed to retain them in treatment as not only will they have the morbidity and complexity associated with addiction, but they will also have the additional stress of engaging with services during a time of unprecedented change. This will require an investment by government in the sector to address an expansion of this magnitude in an area that was already under pressure.

The guidance documents and resources will provide a template for a new way of working for the sector and this can be highlighted by the substantial increase in the percentage of people commenced on buprenorphine/naloxone compared to the more traditional methadone. The rapid induction achieved by following the guidance is likely to continue and we may see a shift in orientation of OST provision in years to come. eConsultation is likely to become an increasingly common practice of providing care particularly in remote locations and this addition to the clinician's skillset has been embraced enthusiastically by staff and clients alike. Whether this approach will continue to meet needs, only time will tell. While the effects of the COVID-19 pandemic will continue to impact society, the responses of health services during the crisis, in this case addiction service, may provide lasting benefits for individuals who are engaging in care during this stressful time.

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Conflict of interest

The authors have no conflict of interest to disclose.

Ethical standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008.

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Appendix A: Guidance documents

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