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Depot buprenorphine during COVID-19 in Australia: Opportunities and challenges

Shalini Arunogiri a,b,*, Nicholas Lintzeris c,d,e

a Turning Point, Eastern Health, Richmond, VIC 3121, Australia
b Monash Alfred Psychiatry Research Centre and Monash Addiction Research Centre, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, VIC 3004, Australia
c Drug and Alcohol Services, South East Sydney Local Health District, NSW Health, Australia
d University of Sydney, Addiction Medicine, Faculty of Medicine and Health, Camperdown, NSW 2050, Australia
e NSW Drug and Alcohol Clinical Research and Improvement Network, NSW Health, Surry Hills 2010, Australia

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ABSTRACT

The COVID-19 pandemic has presented challenges for traditional models of opioid use disorder treatment worldwide. Depot buprenorphine became available in Australia shortly before the height of the COVID-19 pandemic. This timing provided us an opportunity to examine the utilization and uptake of depot buprenorphine, and to understand the particular benefits and implementation challenges associated with this new formulation of opioid agonist treatment.

1. Introduction

Globally, individuals in treatment for opioid use disorder (OUD) are facing unprecedented challenges during the novel coronavirus (COVID-19) pandemic. Individuals with OUD are at an elevated risk of vulnerability to COVID-19, due to co-occurring health comorbidities, mental health sequelae arising from isolation and socioeconomic instability, (Volkow, 2020), as well the need to regularly attend treatment programs for supervised dosing in close proximity to other patients and staff.

Pre-COVID-19, existing Australian treatment paradigms for opioid agonist treatment (methadone, buprenorphine) required most patients to attend dosing points—large centralized clinics, or community pharmacies—on a daily basis during the early phases of treatment, with gradual increases in access to unsupervised doses over months to years, contingent on risk assessment and mitigation strategies (Gowing et al., 2014). Most jurisdictions’ guidelines recommended up to 4 or 5 take-away doses (TADs) of methadone or sublingual buprenorphine-naloxone per week, and while monthly unsupervised doses of buprenorphine-naloxone have been available, few patients across Australia have been able to access this option.

Because methadone and buprenorphine are essential medicines (World Health Organization, 2019), several international bodies issued new guidance and policy directives to facilitate access and ensure continuity of medications for opioid use disorder (MOUD) during COVID-19. In Australia, professional and consumer groups developed consensus guidance (Lintzeris, Hayes, & Arunogiri, 2020) to address some of the specific challenges that face individuals on MOUD. Recommendations included increased access to TADs, strategies for dosing patients in self-isolation, patient surrogates and/or next-of-kin for medication pick-up or supervision, and increased use of telemedicine approaches. The transition to a large number of TADs in response to COVID19 has been a significant divergence from “routine care” in Australia.

Another response to COVID-19 has been the uptake of long-acting depot buprenorphine treatment options (Alexander et al., 2020; Dunlop, Lokuge, et al., 2020; Lintzeris, Hayes, & Arunogiri, 2020; Samuels et al., 2020). This commentary aims to provide a perspective on depot buprenorphine in the context of COVID-19, logistical considerations and challenges, and potential implications for future service provision following the pandemic.

2. Depot buprenorphine before and during the COVID-19 pandemic

Two formulations of depot buprenorphine are available in Australia—Buvidal® (Therapeutic Goods Administration, 2020) and Sublocade® (Therapeutic Goods Administration, 2020b). Both preparations are subcutaneous injections, with the former available for weekly or
monthly dosing, and the latter for monthly (see Table 1). These formulations have only recently been introduced to the market in Australia, with Buvidal® receiving regulatory approval and government subsidy of medication costs (Australian Pharmaceutical Benefits Scheme) since September 2019, while Sublocade® received regulatory approval in early 2020; however, it received government subsidy only as of May 1, 2020. Sublocade® is available for MOUD in the U.S. and Canada; Buvidal®/Brixadi® is available in a number of countries in Europe, and will potentially be available in the U.S. as of late 2020.

The potential for infrequent attendance with depot buprenorphine is clearly attractive in the context of the challenges that COVID-19 poses. Patients do not need to leave home frequently, travel (often using public transport), queue within health services (pharmacies, clinics) that may be crowded and carry the risk of exposure from other patients and staff (Dunlop, Lokuge, et al., 2020); and all these reduce the risk of exposure for staff working in these services. Depot formulations also mitigate risks related to nonmedical use of methadone or buprenorphine provided as TADs, including overdose deaths, which is particularly relevant for high-risk patients for whom a large number of TADs may not be appropriate. Finally, treatment with depot buprenorphine is generally not associated with any out-of-pocket expenses for patients, whereas dosing at community pharmacies is usually associated with a patient fee of approximately AUD40 per week (insurance schemes do not subsidize).

Yet delivering depot treatment during COVID-19 has posed new challenges, such as the need for procedures to minimize the risk of COVID-19 transmission when administering depot SC injections, and how to respond to patients in depot treatment who are in quarantine or self-isolation (Lintzeris, Hayes, & Arunogiri, 2020). Another challenge has been responding to patients in methadone treatment who have requested transfer to depot buprenorphine injections, a process that remains poorly documented or evaluated. An important aspect of patient-centered care patient consent, and while there may be advantages in depot treatment in response to COVID-19, it has been important to ensure that service providers work collaboratively with patients in choosing treatment options, recognizing that not all patients will choose this medication approach.

Clinical trials that developed pre-registration expertise (Dunlop et al., 2020; Frost et al., 2019; Lintzeris, Dunlop, & Haber, 2020; Lofwall et al., 2018; Walsh et al., 2017; Larance, Byrne, Lintzeris et al., 2020), clinical guidance (Lintzeris et al., 2019), training programs for service providers, and patient literature from consumer groups (NSW Users and AIDS Association, 2019) have been important in providing strategies to enhance the uptake of this treatment approach. Nevertheless, the uptake of depot buprenorphine treatment prior to March 2020 had been largely concentrated in a number of clinical services that had been involved in clinical trials, or a handful of “early adopter” individual private practitioners.

It is not possible yet to accurately describe the uptake of depot buprenorphine in response to COVID-19 across Australia. Nevertheless, data are available from some sectors. In New South Wales, government-sector services (traditionally accounting for approximately 40% of opioid treatment, with 60% in private sector) have seen an increase in the use of depot buprenorphine treatment in many, but not all, clinical services (Fig. 1). As at May 2020, data from these 10 local health districts (accounting for 592 patients) showed 40 (7%) patients prescribed Sublocade® and 552 (93%) prescribed Buvidal®. The data suggest that service providers experienced in using depot buprenorphine expanded their use of depot treatment at the start of the COVID-19 outbreak (e.g., those with prior participation in clinical trials); it is these program that account for the majority of all buprenorphine treatment. In contrast service providers with minimal experience with depot buprenorphine did not substantially expand their use of this medication approach. It appears the early days of the COVID-19 pandemic was not a time to "learn new tricks".
3. Depot buprenorphine post-COVID-19

The impact of COVID-19 in Australia has been relatively limited, with few COVID-19 infections and related deaths, by international standards. Addiction treatment services are now focusing on the development of sustainable “exit” strategies. Within this context, providers are reflecting on how to retain aspects of service changes that have proven beneficial to patients and staff.

We cannot predict the role that depot buprenorphine will play within the OUD treatment armamentarium post-COVID-19 restrictions. COVID-19 interrupted many of the usual translational activities (e.g., consumer and workforce development), and renewed efforts will be required to ensure widespread access to this new treatment. Uptake is likely to improve with widespread implementation of low-risk procedures to minimize risk associated with SC injections (e.g., personal protective equipment [PPE] for suspected or confirmed COVID-19 cases; routine screening for symptoms, contacts, temperature; and clinicians and patients wearing masks). Workforce training and sharing of clinical practice will also contribute to increased clinician familiarity, capacity, and confidence over time. One key factor that will impact the uptake of depot treatment will be the extent to which treatment services revert to the predominately pre-COVID-19 supervised model of treatment for methadone and sublingual buprenorphine. If this occurs, it will likely propel more patients toward the convenience of depot treatment. The COVID-19 pandemic has brought about circumstances that have catalyzed the uptake of longer acting treatments and demonstrated the potential utility of depot buprenorphine from both patients’ and providers’ perspectives.

CRediT authorship contribution statement

All authors (SA and NL) contributed to conceptualisation and authorship of the manuscript. SA wrote the first draft, SA and NL contributed to review and editing of revisions.

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