

Knowledge Synthesis: COVID-19 in Mental Health and Substance Use

Synthesis Title: A mixed evidence synthesis of opioid substitution therapy during major disruptions to medical care

Nominated Principal Applicant (name and affiliation):

Dr. Ross Upshur, Lunenfeld-Tanenbaum Research Institute (Toronto)

Dr. Abhimanyu Sud, Family & Community Medicine, University of Toronto (co-PI)

Authors (names and affiliations):

Fabio Salamanca-Buentello, Lunenfeld-Tanenbaum Research Institute (Toronto);

Darren K. Cheng, Lunenfeld-Tanenbaum Research Institute – Bridgepoint, Sinai Health (Toronto);

Pamela Sabioni, Lunenfeld-Tanenbaum Research Institute – Bridgepoint, Sinai Health (Toronto)

Umair Majid, Institute of Health Policy, Management and Evaluation, University of Toronto;

Ross Upshur, Lunenfeld-Tanenbaum Research Institute (Toronto);

Abhimanyu Sud, Family & Community Medicine, University of Toronto

For more information, please contact:

Abhimanyu Sud

abhimanyu.sud@utoronto.ca

Target/priority population(s) in synthesis:

- Healthcare providers (e.g. physicians, pharmacists, nurses, nurse practitioners, social workers, addiction and chronic pain specialists)
- Health system administrators
- Health leaders and policy-makers
- General public

What is the issue?

The year 2020 has seen a collision of two complex health crises: the novel coronavirus pandemic and the persistent epidemic of opioid-related harms. People living with opioid use disorder (OUD) are especially vulnerable to the pandemic and the upheaval it has caused. Opioid substitution therapy (OST) is first-line treatment for OUD and can be life-saving. It requires regular and frequent visits with health care providers, and thus has been affected by responses to the pandemic such as physical distancing measures and disruption of transport systems. Medication and drug supplies have also been disrupted during this pandemic. The risks of withdrawal, overdose, and diversion of opioids have increased, so there is an urgent need to adapt existing methods of providing OST and to support people with OUD.

The purpose of this review is to identify and synthesize the views, perspectives, and experiences of people who use opioids, health care providers, system administrators, and policy makers on OST in the context of major and sustained disruptions to medical care, such as we have seen during the current pandemic. To operationalize the major themes identified in our synthesis, we have ascertained, in conjunction with our integrated knowledge users, a list of potential action items that address each of the themes.

Key messages (max 100 words):

- Disaster planning must consider the healthcare of people who use drugs (PWUDs) and, specifically, individuals living with OUD.
- There is an identified need for:
 - standardized but flexible guidelines for OST clinic operation during an emergency
 - communication strategies that connect PWUDs with OST clinic staff and with alternative sources of treatment
 - networks of OST clinics that support each other during an emergency
 - coordination between clinics and different government levels to prepare for and address emergency situations
 - mechanisms (such as centralized databases) to verify essential information regarding PWUDs, their medical records, and their medications and dosages

How was the synthesis conducted?

We carried out a mixed evidence review on the impact of major medical disruptions such as infectious disease pandemics, natural disasters or human conflicts on OST. The research team included experts in: population-level harms from opioids and OUD, infectious disease pandemics, major disruptions to medical care, health system administration including for the delivery of system-wide OUD care, global mental health, mental health and substance use-related stigma, and evidence synthesis including specifically qualitative evidence synthesis.

Study identification and selection involved two stages and three existing systematic review databases. Keywords and eligibility criteria were developed in collaboration with knowledge users (KUs). We included studies that: 1) examined OST in the context of major disruptions to medical care, including but not limited to reflections on care provision, evaluations of response, examinations of disaster preparedness, or innovations in OST (e.g. use of extended release formulations, virtual care); 2) were primary, empirical research studies (qualitative, quantitative, and mixed methods); and 3) were peer-reviewed and available in full-text. We included studies regardless of date, language, publication, setting, or country. Records were keyword searched, title and abstract screened and full-text screened independently and in duplicate. For the initial phase, we retrieved records from an ongoing qualitative evidence synthesis of OST. Of the 8,057 records retrieved, 447 high-relevance studies were expedited to title and abstract screening. Keyword searching of the remaining 7,610 low-relevance records identified an additional 545 studies for a total of 992 records that underwent title and abstract screening. We found 18 relevant records that underwent full-text screening; of these, 10 met our inclusion criteria.

For the second phase, we compiled records from two databases from two separate reviews of barriers and facilitators to OST. We removed duplicates between these two databases and records identified in the initial database. Records were then keyword searched. We retrieved 14,037 records from the additional databases, removed 1,511 duplicate records between them, and an additional 1,707 duplicates with the first database. A total of 10,819 unique studies were left for this second stage. These were keyword-searched to identify 1,010 records for title and abstract screening. We selected five studies for full text screening and included two in our analysis.

Finally, to identify any potentially relevant contemporary literature on the topic of our study, one author conducted regular, informal hand-searches of the medical literature on OST and COVID-19 as well as inspection of the references of included articles. We identified 43 high relevance records, which underwent full-text screening. One study fulfilled our inclusion criteria and was included in the analysis.

In total, we analyzed 11 independent studies. We first analyzed the qualitative studies and the qualitative portions of mixed methods studies. Included articles were read in full by one author, who also performed data extraction and analysis through coding, adopting an open perspective to emergent themes and concepts. The remaining authors reviewed all studies, after which the research team discussed and refined the coding and the initial taxonomy of themes. This taxonomy was presented to the KUs to obtain feedback on the categorization of results and on knowledge mobilization planning. Based upon multiple discussions among the authors and with KUs, we developed a final taxonomy of themes.

We then analyzed the quantitative studies and quantitative portions of mixed methods studies. We conducted narrative summaries of the studies and used these findings to inform the themes identified from the qualitative synthesis.

What did the synthesis find? Provide a lay summary of the outcomes (max 300 words):

Disaster planning rarely considers the healthcare of PWUDs. Disrupting OST can cause severe consequences for PWUDs such as relapse, withdrawal, and restart of risky injection behaviours.

Service continuity is essential for reducing physical and psychological problems for PWUDs in OST, their families, and their communities. In the context of disasters, PWUDs worry about lack of medication and healthcare, the risks of withdrawal and relapse, and the greater uncertainty in their lives. Disasters force PWUDs to find different ways of getting opioid medications to avoid withdrawal symptoms. Some people even see disasters as opportunities to start therapy and move away from drug use.

During a disaster, providers are concerned about lack of coordination among independent OST clinics, and between the clinics and different levels of government; strict and inconsistent regulations over OST programs; and the inability to retrieve essential patient information. Providers are also worried by issues related to access to OST medication stock, prescribing medications, and verifying doses, because suddenly interrupting OST medications leads to instability and increases the risk of relapse.

PWUDs and providers are concerned about lack of information on emergency procedures; communication, transportation, and accessibility issues; absence of psychological and emotional support; and social and cultural conflicts arising when PWUDs and providers need to be relocated to other clinics.

We also found potential solutions to many of these challenges, such as: creating centralized databases with essential information about PWUDs and their medical records, medications, and dosages; designing consistent but flexible guidelines for operating OST clinics during an emergency; communicating and connecting PWUDs with OST clinics and with other treatments available; developing networks of OST clinics that support each other during an emergency; partnering with public and private transport companies; providing mental healthcare for PWUDs and providers; and assigning a clinic staff member as a Disaster Preparedness Deputy.

What are the implications of this synthesis?

- Several barriers and obstacles are identified in the context of disruptions to medical care
- Many pre-existing issues are exacerbated by disruptions but also present possible opportunities for change
- Standardized but flexible disaster preparedness guidelines are needed to allow adequate and efficient health system response to disruptions

List up to 10 keywords specific to this synthesis to facilitate website search filters and sorting:

- Opioid
- Opioid use disorder
- Methadone
- Buprenorphine
- Opioid substitution therapy
- Disruptions to medical care
- Emergencies
- COVID-19
- Pandemic
- Disaster preparedness

