

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

### Instructions:

The [Operating Grant: Knowledge Synthesis: COVID-19 in Mental Health and Substance Use](#) was designed to enable the development of rapid and timely knowledge syntheses and related knowledge mobilization plans to address evidence gaps and build the evidence base as part of the mental health and substance use response to COVID-19.

As outlined in the decision letters sent to successful applicants, this template is being provided in order to facilitate the rapid sharing of results with relevant [knowledge users](#). Information recorded in this report may be made available to policy makers, healthcare and service providers, partners, and the general public, and will be used to populate a website and inform a variety of CIHR knowledge mobilization products. Responses should be written in plain language, respecting word limits where indicated.

**Synthesis Title:** Interventions to Mitigate COVID-19 Related Mental Health Risks for Those with Pre-Existing Chronic Health Conditions and Facing Social and Economic Barriers: A Scoping and Rapid Realist Review

**Nominated Principal Applicant (name and affiliation):** Karen Davison, Kwantlen Polytechnic University

### Authors (names and affiliations):

**Core Team:** Simon Carroll, University of Victoria; Benjamin Collins, University of Manitoba; Carla D'Andreamatteo, University of Manitoba; Esme Fuller-Thomson, University of Toronto; Brandon Hey, Mental Health Commission of Canada; Krystal Kelly, Mental Health Commission of Canada; Marya Jaleel, Mental Health Commission of Canada; Shen (Lamson) Lin, University of Toronto; Maura MacPhee, University of British Columbia; Laura Mullaly, Mental Health Commission of Canada; Arun Ravindran, The Centre for Addiction and Mental Health; Ron Remick, Lookout Housing and Health Society and Mood Disorder Association of British Columbia; Janice Sorensen, Kwantlen Polytechnic University, Vicki Smye, Western University; Lorna Stabler, Cardiff University; Vidhi Thakkar, Kwantlen Polytechnic University

**Patient Advisors:** Marcie Dolce, Patient Advisor; JoAnne Marvin, Patient Advisor; Lynda Robson, Patient Advisor; Lori Stuart, Patient Advisor

**Research Assistants:** KPU: Jasmine Chen, Sophy Lin. McMaster University: Richard Cheung, Jake Coulautti, Kyobin Hwang, Misha Ishtiaq, Helena Kim, Shaheer Nadeem, Sammah Yahya, Zachary Rezler

**For more information, please contact:** Karen Davison, Email: [karen.davison@kpu.ca](mailto:karen.davison@kpu.ca)

### Target/priority population(s) in synthesis:

1. **Individuals with health conditions that present risk of contracting COVID-19:** Obesity; Diabetes; Cancer; Heart disease; Respiratory conditions; Autoimmune conditions; Inflammatory bowel disorders (e.g., ulcerative colitis, crohn's); Kidney disease; Liver disease; HIV/AIDS; Hepatitis; Frailty; Dementia and related conditions; and

2. **Individuals who have mental health or substance use-related concerns** such as depression, anxiety, psychosis, trauma, stress, substance use, addictions, or compulsive behaviours

Within these groups, we will also examine special populations such as men, women, older adults, immigrants, refugees, newcomers, ethnocultural and racialized communities, First Nations, Inuit and Métis, 2SLGBTQ+, and individuals with disabilities

### **What is the issue?**

In the absence of a vaccine or cure for COVID-19, it is important to address the mental health challenges of the current pandemic. This is especially important for individuals with a physical health condition that makes them more vulnerable to COVID-19 infection and having more severe disease. The COVID-19 pandemic has increased the need to assess the impact of measures such as quarantine, social distancing, and altered health care access as well as mental health concerns resulting from physical distancing, extended emergency state, unexpected unemployment, and grief. The study we have undertaken is intended to find information about interventions used for those with physical health conditions that help to foster mental health. This information will be useful to apply in the current pandemic and future public health crises.

### **Key messages (max 100 words):**

The COVID-19 pandemic has and continues to have devastating impacts, particularly among those who are at risk of contracting the infection. For many, this has led to mental health effects such as depression, anxiety, behaviour changes, and the use of substances to help mask the pandemic's consequences. However, there is opportunity to support population health during these difficult times by offering appropriate interventions that are tailored to different populations with unique needs. By using a mental health promotion perspective we plan to provide directions about how to move toward a more responsive health system that support coping and resilience among different populations.

### **How was the synthesis conducted?**

The synthesis included searching for studies from both the English language literature and the Chinese language literature. We searched English databases that included EMBASE, Medline (OVID), PsycInfo, CINAHL, and Sociological abstracts. We also search Chinese databases that included China National Knowledge Infrastructure (CKNI), Wang Fang Data (E-Resources for China Studies), and Airiti Library (Taiwan). We also searched various grey literature sources of health organizations, governments, and appropriate academic sources. We conducted these searches in June, July, and October. We used search terms related to COVID-19, various physical health conditions such as obesity, cardiovascular disease, cancer, diabetes, respiratory disease, kidney disease, HIV/AIDS, autoimmune conditions, and health condition of the intestinal system. In conjunction with these we added other search terms related to mental health (e.g., depression, anxiety, stress, trauma) and substance use. Two trained reviewers examined each literature source to determine if it meet the inclusion criteria. This was conducted in a software program called Covidence. Information from the final set of articles was extracted using structured data collection tables. The information was summarized. After this, the team reviewed the literature using realist approaches which involved looking at the literature using a Mental Health Promotion Framework. This helped to determine what types of interventions may work for different people in different contexts.

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

We used the information from 84 articles; 64 from the English language literature and 19 from the Chinese literature. We found different examples of interventions that were intended to promote mental health in those with physical health conditions that are at higher risk of COVID-19 infection. Broad level interventions that were recommended including addressing the factors which contribute to social and economic barriers such as education, income, and employment. In addition, it was suggested that interventions that will help people to better understand the health information they receive during the pandemic be offered. Interventions that were recommended for health services included telehealth and providing services that are flexible. It was also suggested that people be asked about their mental health by practitioners to determine if they need more intensive services. Other suggestions included social prescribing, where health practitioners prescribe social activities, online group exercise programs. that help people to cope better. To complement health services various resources and tools were recommended including, mobile apps that can help monitor symptoms, providing peer supports and patient navigator programs, and lifestyle interventions. More recently virtual reality approaches are being tried where people with mental health issues visit with their practitioner in a 3-dimensional virtual space that provides more of a psychological presence. Many of the recommendations for interventions to help foster mental health were based on practices currently used. None had been rigorously examined in the context of the pandemic to determine if they were effective. Using the realist approach the team identified five simple rules that are needed for the operation of many of the interventions. These included having trust and feedback, accountability and responsibility, reducing power differences, fostering resilience, and promoting social connectedness.

**What are the implications of this synthesis?**

This project provided information that is relevant to practitioners by highlighting what interventions may be helpful to try with their clients to help promote their mental health. By using a Mental Health Promotions Framework a comprehensive analysis was done of different levels of the health care system and recommendations made to help make the system more responsive to the needs of those in which services are offered.

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

(e.g. depression, virtual care, autism, opioids, racism, chronic pain, sleep, etc.)

1. COVID-19
2. Mental health
3. Substance use
4. Chronic diseases
5. Autoimmune conditions
6. Inflammatory bowel disorders
7. Kidney diseases
8. Liver diseases
9. HIV or AIDS
10. Neurocognitive conditions