

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

Synthesis Title: Digital Health Solutions to Support Women with Addiction During COVID-19: Applying a Gender- and Trauma-Informed Lens

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Target/priority population(s) in synthesis:

- Adults (18 years and above)
- Report risky or harmful substance use (except for nicotine or caffeine)
- Identify as a female/woman OR report history of trauma

What is the issue?

- The COVID-19 global pandemic has had extensive impacts on the mental health and substance use of Canadians.
- The healthcare system has rapidly adapted current models of care to accommodate physical distancing requirements, with an emphasis on digital health platforms and supports. Digital health resources for women with substance use difficulties are critical during this time.
- Current evidence-based guidelines have highlighted the importance of gender- and trauma-informed treatment of addiction in women. The majority of treatment settings have yet to integrate digital health supports to facilitate the provision of gender- and trauma-informed care, however.

Key messages:

- Digital health resources for addiction range from mobile applications, web-based screening and brief interventions, and web-based multimedia and multi-module platforms.
- Overall, empirical investigations including adults who identified as female or women generally revealed positive effects. Mobile and web-based platforms demonstrated therapeutic benefits more consistently than brief interventions.
- Empirical evaluations rarely assess gender identity or conduct sex- or gender-based analyses; evidence specifically for females or women is therefore weak.

- Resource ratings suggested many resources provide sex or gender specific information, and support empowerment; however, most other principles of gender-informed care are not evident. Most resources upheld several principles of trauma informed care (e.g., strengths-based care); however, others were less represented.

How was the synthesis conducted?

This synthesis consisted of two components:

1. Scoping Review:

- A Scoping Review was conducted, following the recommendations of Arksey & O'Malley (2005).
- Research team members collaboratively developed the following:
 - Specific research questions
 - Eligibility criteria
 - Search strategy
- Research team members then identified records from five databases (Medline, PsycINFO, Embase, Cochrane Central, and CINAHL; 4829 records total; 3244 records following removal of duplicates) and Grey Literature (1773 records)
 - Two independent team members completed identification of studies in two stages; discrepancies were resolved by consensus:
 - (1) Title and abstract (4977 records screened; 4620 excluded)
 - (2) Full text (355 screened; 234 excluded)
- Data was extracted from the 121 articles that were included after the full text screening was complete
- Inter-rater reliability estimates were calculated for each stage of the screening process; team members demonstrated substantial agreement during both title and abstract screening and full text review

2. Resource Rating: The rating of digital health resources was conducted following a series of steps.

- *Resource Identification:* Research team members identified digital health resources from the following resources: scoping review; hospital websites (e.g., www.camh.ca); professional, not-for-profit, and other websites (e.g., www.cmha.ca, www.otn.ca, www.amho.ca); government websites; curated app libraries.
- *Rating Scale Development:* Research team members initially identified a pool of rating questions to assess whether digital health resources were characterized by the principles of gender- and trauma-informed care. These questions were revised and reduced, with a detailed scoring key.
- *Rating Scale Implementation:* Two independent research team members applied rating the 23 eligible resources on each domain. Team members demonstrated substantial agreement; discrepancies were resolved by consensus.
- Overall ratings for gender and trauma informed care were applied to the identified resources on a 5-point Likert scale from "Very strong" to "Not strong at all"

What did the synthesis find? Provide a lay summary of the outcomes:

- Digital health resources for addiction identified in the academic literature included single or multi-session interventions, delivered online or via mobile app or text message, and including a wide range of clinical components
- Studies included a range of sample types and substance use targets. Clinical, community, and university/college student samples were the most common samples (21-34%), and alcohol use (64%) was the most frequent target substance.

- Overall, studies concluded that digital health resources for addiction were efficacious or effective (80%); however, this was quantitatively confirmed for females or women in only 11% of studies, with 85% of studies not reporting relevant analyses and 4% finding the intervention to be ineffective.
- Investigations with adults reporting a history of trauma was limited (n=10), and the association between trauma history and clinical outcomes was not evaluated
- A substantial proportion of investigations did not assess gender identity or conduct sex- or gender-based analyses, precluding clear inferences about the evidence for the efficacy or effectiveness of these interventions in females or women specifically.
- Empirical investigations demonstrated other methodological shortcomings, and some indications of bias. Few (4) were conducted in Canada.
- Ratings of digital health resources for addiction available in Canada suggested that these resources provide sex or gender-specific information, and support empowerment at least to some degree; however, the majority of the principles of gender-informed care are not evident in these resources. No resources were rated as “very strong” or “strong” for consistency with gender-informed care, and the majority (16) were rated as “not strong.”
- Ratings suggested that resources uphold more principles of trauma-informed care (e.g., safety and trustworthiness; choice, control, and collaboration; strength-based and skills-building; care and empowerment). However, other principles were less robustly represented, if at all. Four resources were rated as “strong” for trauma-informed care, with the majority (n=14) rated as “somewhat strong.”

What are the implications of this synthesis?

- The evidence to support the efficacy and effectiveness of digital health resources for addiction while promising, highlights the need for further investigations in females or women, particularly in the application of analytic approaches permitting clear conclusions regarding their benefit for women. The evidence for these interventions in those who report trauma is limited in quantity, and frequently specific to special populations.
- There is a need to develop innovative digital health resources to support the provision of remote gender- and trauma-informed care. Currently available resources do not uphold all features of these best practice guidelines.

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

- Addiction
- Substance misuse
- Substance use disorder
- Women
- Female
- Trauma
- Abuse
- Digital health
- Web-based treatment
- eHealth