Instructions:

The Operating Grant: COVID-19 Mental Health & Substance Use Service Needs and Delivery aims to address the specific mental health and/or substance use crisis response needs resulting from the COVID-19 pandemic and/or the strategies to contain and mitigate its impact.

As outlined in the conditions of funding, funded teams are required to provide knowledge mobilization updates. The purpose of this report is to inform CIHR’s knowledge mobilization efforts, promote the work being done by teams funded in this competition, and better understand the barriers and facilitators that research teams are experiencing.

This final report template has been tailored based on data collected in previous reports in order to facilitate accurate reporting for the projects funded through this competition.

Information recorded in this report may be made available to knowledge users, including policy makers, healthcare and service providers, partners, and the general public, and may be used to facilitate additional CIHR knowledge mobilization activities, and enable linkages between research teams and partners and/or knowledge users.

Please complete this report even if your project is ongoing.


Date: August 24, 2021

Project Title: Acceptability and Impact of a Prenatal Internet Intervention for Promoting Maternal Mental Health in the COVID-19 Context

Nominated Principal Investigator (name and primary affiliation): Deborah Da Costa, PhD, Research Institute of the McGill University Health Centre
SECTION 1. PROJECT CHARACTERISTICS

1A. Target age range under investigation (check all that apply):
- [ ] Children (0-11 years old)
- [ ] Youth (12-18 years old)
- ☒ Young adults (19-25 years old)
- [ ] Adults (26-69 years old)
- [ ] Older adults (70+ years old)

1B. Target/priority population(s) under investigation (check all that apply):
- ☒ Parents of children (including pregnant women)
- [ ] Caregivers
- [ ] Bereaved individuals
- [ ] Indigenous Peoples and communities
- [ ] Refugees
- [ ] Individuals released from correctional settings
- [ ] LGBTQ2S or 2SGBQM
- [ ] People who use drugs
- [ ] Individuals with pre-existing chronic health conditions
- [ ] Individuals with pre-existing mental illness
- [ ] Healthcare workers (including trainees)
- [ ] Public safety personnel
- [ ] Other (please specify):

1C. Methodologies used (check all that apply):
- ☒ Evaluation of intervention (specify):
  - [ ] Self-guided intervention
  - [ ] Workshop or webinar
  - [ ] Peer-to-peer support
  - [ ] Single session intervention
  - [ ] Therapist-assisted intervention
  - [ ] Specialized intervention
  - [ ] Model of service delivery
  - [ ] Other:
- [ ] Qualitative methods (e.g., focus groups, interviews)
- [ ] Cross-sectional survey
- [ ] Longitudinal cohort
- [ ] Systematic review
- [ ] Indigenous approaches
- [ ] Other:
1D. Recognizing the potential barriers to research due to the COVID-19 pandemic, and to inform CIHR-led knowledge mobilization activities, please describe the current status of this project:

<table>
<thead>
<tr>
<th>Ethics approval obtained</th>
<th>Yes</th>
<th>No (pending)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection (e.g. participant recruitment, cohort development)</td>
<td>Not started</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Data analyses</td>
<td>Not started</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Knowledge mobilization activities (e.g. manuscripts, presentations)</td>
<td>Not started</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

If the project is not complete, please indicate expected completion date: August 2022

Additional comments (if required):

1E. What is the geographic location your project is focused on (check all that apply)?

- [ ] Pan-Canadian
- [x] Specific province(s) and/or territory(ies), please list: Quebec
- [ ] International
- [ ] Indigenous communities
- [ ] Other:

SECTION 2: PROJECT RESULTS

2A. Provide a plain language (lay summary) update on the results and key messages of this project to be published on CIHR’s website [https://cihr-irsc.gc.ca/e/52079.html](https://cihr-irsc.gc.ca/e/52079.html) (maximum 200 words):

Final approval from our institution’s Research Ethics Board was received in April 2021. Recruitment through social media ads and community organizations was launched at the end of April 2021 and we have successfully enrolled 76 pregnant participants. Given that recruitment is ongoing we do not have results for our main study objectives. However, our preliminary results with the sample recruited to date suggest that at study entry 20% of women had clinically elevated symptoms of depression and 17% met the criteria for high anxiety, both of which are higher than estimates from our 2019 pre-pandemic pregnant cohort (10% and 8%, respectively). Our finding suggest that even at this later stage of the COVID-19 pandemic, pregnant women continue to experience higher levels of depression and anxiety symptoms. These results underscore the need for innovative digitally delivered interventions, such as the one we are currently evaluating, to prevent or reduce further exacerbation of maternal distress during the ongoing COVID-19 pandemic.

2B. List up to three key “successes” of your project:

- Thus far, among pregnant women who are eligible and agree to be sent a link to the electronic consent and baseline questionnaires, our rate of consent and survey completion is 96.2%.
• Very favorable ratings of our on-line platform by our participants. For example, our preliminary results indicate that 86% of participants reported that the content in the website was highly credible and 60% were in strong agreement that that the additional resource recommendations (e.g. internet sites, apps) in the website were useful sources to get additional information.

• We have an updated bilingual self-guided on-line platform that can be used to promote the mental health of pregnant individuals.

2C. How do your results fit (or not fit) with current research addressing this topic (locally, nationally, internationally)? Please describe any unexpected findings from your project.

Recruitment is ongoing, hence we do not have results related to our main study objectives. Our baseline data on the participants recruited thus far (n=76) support national and international data showing higher levels of psychological distress (e.g. depression, anxiety) among pregnant women compared to prepandemic cohorts.

2D. How can the outcomes of this project address the mental health or substance use needs of vulnerable or at-risk populations in an equitable manner?

Our comprehensive e-health intervention is designed to be self-guided and is tailored to the perinatal period with content targeting risk and protective factors for perinatal psychological distress. This bilingual intervention was designed and piloted to fit alongside existing antenatal care services. Evaluating user uptake, engagement and benefits in promoting maternal mental health during the COVID-19 pandemic will provide new knowledge on how digital approaches can be rolled out rapidly across Canada to address the mental of vulnerable populations. Our approach of promoting maternal health through preventive action has the potential to positively impact maternal, infant, and family outcomes.

☐ This was not in the scope of our project.

2E. Over the course of the entire project, briefly list up to three challenges to conducting this research within the COVID-19 context?

• Delays in obtaining REB approval due to high volume of COVID-19 related studies submitted for ethics review.

• Inability to recruit in person at antenatal clinics due to COVID-19 restrictions.

• Challenges recruiting through social media e.g. guidelines for ad content is not clear for Facebook or Instagram and therefore recruitment ads can initially get rejected, causing delays.

2F. Briefly list up to three facilitators to conducting this research within the COVID-19 context?

• Support of Quebec Alliance Perinatal Mental Health (formerly Quebec Reproductive Psychiatry Network)

• Support of community organizations working with pregnant mothers (e.g. Montreal Diet Dispensary)

• On-line data collection at all timepoints and an internet delivered intervention, which does not require participants to visit our laboratory.
2G. Please describe if/how you have leveraged additional funding to support the sustainability and/or ongoing work for your project.
We are not at this stage yet.

SECTION 3. KNOWLEDGE MOBILIZATION

3A. How were specific stakeholder groups engaged in your project? (e.g., patient partners, health and/or mental health providers, decision makers, knowledge users, etc.)
Patient partners reviewed and provided feedback on our various social media recruitment ads.
Knowledge users affiliated with the Quebec Alliance Perinatal Mental Health (formerly Quebec Reproductive Psychiatry Network) have assisted in participant recruitment.
Input from knowledge users on additional resource links to add to our digital platform.

3B. What is the next important gap or question that needs to be addressed in the COVID-19 recovery context?
Longitudinal studies are needed to examine the long-term impacts of the pandemic on parental and child mental health outcomes.

3C. Knowledge dissemination plan (complete the following table):

<table>
<thead>
<tr>
<th>Product/Tactic/Strategy (May include: infographics, reports, webinars, websites, etc.)</th>
<th>Target audience(s)</th>
<th>Partner organization(s) engaged in (or leading) knowledge dissemination</th>
<th>Timing</th>
<th>Will the product be bilingual (Y/N)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference presentations</td>
<td>Researchers, Health care professionals</td>
<td>Canadian National Perinatal Research Meeting;</td>
<td>February 2022</td>
<td>N</td>
</tr>
<tr>
<td>Topic</td>
<td>Audience</td>
<td>Source (Organizations)</td>
<td>Timeframe</td>
<td>Reactivate?</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>---------------------------------------------</td>
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</tr>
<tr>
<td>Society of Obstetricians and Gynecologists of Canada (SOGC) Annual Conference</td>
<td></td>
<td>Society of Obstetricians and Gynecologists of Canada (SOGC)</td>
<td>June 2022</td>
<td></td>
</tr>
<tr>
<td>2 peer reviewed publications</td>
<td>Researchers, Health care professionals</td>
<td>Our research team</td>
<td>Fall 2021; July 2022</td>
<td>N</td>
</tr>
<tr>
<td>Press releases</td>
<td>Public</td>
<td>RI-MUHC</td>
<td>Around the time each above manuscript is published</td>
<td>Y</td>
</tr>
<tr>
<td>Study website</td>
<td>Researchers, Health care professionals, public</td>
<td>RI-MUHC</td>
<td>ongoing</td>
<td>Y</td>
</tr>
<tr>
<td>Research summaries in organizational electronic newsletters</td>
<td>Researchers, Health care workers, public</td>
<td>RI-MUHC, McGill University, Quebec Alliance Perinatal Mental Health (formerly Quebec Reproductive Psychiatry Network)</td>
<td>Around the time each manuscript is published</td>
<td>Y</td>
</tr>
<tr>
<td>Podcasts</td>
<td>Public</td>
<td>e.g. Curious neuron</td>
<td>September 2021; June 2022</td>
<td>N</td>
</tr>
<tr>
<td>Infographics</td>
<td>Public, Health care workers</td>
<td>posted on Facebook pages</td>
<td>Around the time each manuscript is published</td>
<td>Y</td>
</tr>
<tr>
<td>is published</td>
<td>News article</td>
<td>Public</td>
<td>Montreal Families</td>
<td>published June 2021</td>
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<tr>
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</tr>
<tr>
<td>World Maternal Mental Health Day</td>
<td>Researchers. Health Care professionals</td>
<td>McGill University Health Centre</td>
<td>May 2022</td>
<td>N</td>
</tr>
</tbody>
</table>

3D. How could CIHR enhance knowledge mobilization, dissemination, or uptake of knowledge from this project, including tactics outlined in the knowledge dissemination plan (above)?

The study findings should be featured for example in Health research in action section of the CIHR website.