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Target/priority population(s) in synthesis:

Trauma Affected Populations (TAPs) including Military Members, Veterans and Public Safety Personnel (e.g., border services, communications officials, correctional workers, firefighters, paramedics, police, etc.).

Background. Physical distancing arising from COVID-19 has rapidly forced a paradigm shift toward remote mental health (MH) service delivery and a surge in the use of digital health (DH) (e.g., teletherapy/medicine, eHealth, and mHealth) 1,2. Though in limited use mere months ago, DH has become essential for system access, assessment, and treatment 3. Legal, clinical, cultural, practical, service provider billing, and security considerations, however, remain unaddressed for delivering MH services to trauma-affected populations (TAPs). TAPs include public safety personnel (PSP; e.g., border services, communications officials, correctional workers, firefighters, paramedics, police, etc.), military members, and Veterans struggling with Post-Traumatic Stress Injuries (PTSIs) and other MH concerns that can be associated with or exacerbated by the pandemic.

Post-Traumatic Stress Injuries refer to a range of problems including mental disorders such as Posttraumatic Stress Disorder (PTSD) and other mental health conditions that may not meet diagnostic criteria but interfere with daily functioning in social, work or family activities 4. Approximately 20% of Canadians will experience a mental health challenge or illness 5. Comparatively, a 2018 Canadian study reported that 44% of PSP screened positive for at least one mental health disorder 6, while in 2013, about 17% of full-time Canadian Armed Forces (CAF) Regular Force (RF) members reported symptoms of at least one mental illness such as depression, panic disorder, PTSD, generalized anxiety disorder, and alcohol abuse or dependence. Within these groups, women may be at greater risk of PTSIs, with rates being higher among female CAF RF members than males for depression, GAD and PTSD 7. Among CAF RF Veterans, 2016 reported rates were PTSD (16%), depression (21%), anxiety (15%) 8. Unaddressed, PTSIs can leave frontline responders unable to function, which, during the pandemic, can put an additional strain on the system and compromise the welfare of Canadians. Efforts are needed to ensure that safe, accessible MH supports are available to PSP, military members and
Veterans struggling with PTSIs during and after COVID-19 so that they can receive the care they need and continue to critically contribute to Canada's health and safety.

As TAPs may be particularly affected by changes from in-person to digital delivery of MH services, an understanding is needed of: (1) the clinical effectiveness of DH when addressing PTSIs; (2) perspectives of TAPs, MH clinicians, senior leadership and policymakers; (3) the current context, needs, and considerations associated with DH uptake and use; and (4) realistic solutions for effectively delivering DH to TAPs.

**Objectives.** This scoping review aims to synthesize knowledge of the advantages, barriers, and recommendations regarding digital vs. in-person MH service delivery to TAPs. Review findings will inform the extent to which use of digital MH service delivery will be appropriate for those suffering from PTSIs and other MH challenges.

**Methods.** This scoping review employed the following steps: 1) formulation of PICOS research questions (Population, Intervention, Comparison, Outcome, Study type); 2) identification of relevant studies; 3) selection of studies; 4) charting of data; and 5) collation, analysis, summarization, and reporting of results.

**Findings.** The search strategy yielded 629 articles, 286 of which remained after deduplication and were screened at the title/abstract level. The full text of 131 manuscripts were reviewed, 93 of which were excluded. The remaining 38 studies were included in the review and subjected to full text review, data extract and analysis. Preliminary evidence supporting digital vs. in-person delivery of trauma-focused MH services for TAPs with PTSIs is encouraging but limited, as is the quality of the evidence. A brief summary of advantages, barriers and recommendations identified in the review follows.

**Advantages** include the 1) convenience and cost-effectiveness of remotely accessing teletherapy9 (especially for clients in rural areas), 2) comfort for clients of engaging from their home10, 3) stigma reduction as a result of not having to physically go to a MH facility11, 4) unchanged treatment efficacy or drop out rates12 when DH was used. Based on review findings, DH has several potential benefits over in-person therapy. For clients open to using DH, clinical outcomes may not differ.

**Barriers** include 1) technological issues and disruptions12,13, 2) inconsistent access to secure high quality internet connections12, 3) lack of openness to using DH by some clients9, 4) privacy concerns associated with the home environment11, 5) ease of client disengagement from a session and enablement of avoidant behaviours14,15, 6) challenges associated with establishing a therapeutic alliance and managing intervention activities (i.e., homework)15, and 7) challenges managing safety and risk remotely, particularly regarding suicide risk9.

**Recommendations** related to DH use for delivering evidence-based psychotherapy to TAPs include: 1) address technological issues12, 2) supplement interventions to increase patient comfort (16), 3) consider ways for MH practitioners to establish and maintain rapport and trust17, 4) provide additional supports and flexibility to clients as required to support progress and commitment to therapy18,19,20, 5) review previously established standards and practices of delivering certain psychotherapeutic interventions to improve suitability for DH, and 6) consider issues related to risk and safety due to the remote and independent nature of telehealth21.

**Conclusion.** Preliminary evidence supporting digital vs. in-person delivery of trauma-focused MH services for TAPs with PTSIs is encouraging but limited, with the quality of the currently published evidence requiring further systematic review. Several advantages are identified regarding virtual delivery during times of COVID-19, most notably accessibility in the absence of other MH services. Additional advantages relate to DH’s convenience, accessibility, cost effectiveness, stigma reduction, and efficacy and drop-out rate similar to in-person delivery. Given that findings in the literature, however, indicate that only specific evidence-based trauma-focused modalities have been tested using DH (i.e., CPT, CBT, PE), we cannot presume that remote delivery of all trauma-focused modalities is equally effective. Further, we do not as yet understand which therapeutic modalities work
for whom in relation to in-person vs. DH service delivery, nor the role of context(s), patient factors, therapist skill set, or phase of the therapeutic process in determining the impact of DH service delivery. More research is needed. Consideration is also needed regarding technology issues when using DH (e.g., internet bandwidth, device access), and organizational/legal concerns (i.e., access to health compliant secure platforms). Recommendations found in the literature are specific to MH clinicians, particularly their receipt of appropriate training in the digital delivery of trauma-focused modalities, need to consider the compatibility of therapeutic elements with technology, and responsibility related to technology quality and security. Intentional efforts by clinicians are also needed to establish and maintain the therapeutic relationship and foster client engagement. Finally, due to the remote and independent nature of DH, it is advisable that practice, risk and safety protocols be reviewed and developed. While DH solutions are necessary and review findings promising, a cautious approach is warranted until more evidence-based literature is available prior to the widespread adoption of digital vs. in-person trauma-focused services for TAPs with PTSIs.

References:


