Here To Stay: Digital Mental Health in a Post-Pandemic World
Looking at the Past, Present, and Future of Teletherapy and Telepsychiatry

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The COVID-19 pandemic has resulted in a dramatic shift of mental health treatment toward digital delivery. Growing adoption rates suggest that this change could be permanent, backed by research showing that digital mental health is beneficial and increases access to care.

This symposium focuses on a new, scalable, form of digital treatment: messaging therapy. Message-based psychotherapy is a novel delivery method that has the potential to solve problems of access and scale while preserving the benefits of individualized treatment and the therapist relationship. Research on this delivery method is rapidly growing and has focused on outcomes among particular diagnostic groups, treatment modalities, and demographic categories. How well does this data live up to the promise?

We will examine: 1) how messaging therapy was used by essential healthcare workers during the peak of the COVID-19 pandemic; 2) how messaging therapy was used as primary public health intervention in Reno, USA; 3) what we know about messaging based therapy to date; and 4) how this digital mental health post-COVID growth suggests therapy in writing is not just a 'crisis time' intervention.

Taken together, these findings suggest that digital mental health is beneficial, and when delivered in one particular form, messaging therapy, increases access and scalability of provider/therapist time to achieve impacts more akin to a public health intervention.

Keywords: Digital mental health, teletherapy, two-way messaging therapy, virtual therapy, telehealth

How Messaging Therapy Was Used by Essential Healthcare Workers during the Peak of the COVID-19 Pandemic
Matteo Malgaroli, PhD (NYU School of Medicine)

Healthcare workers (HCW) including doctors and nurses are on the frontlines of the COVID-19 pandemic, significantly impacted and yet understudied. COVID-19 stressors for HCW have been manifold, with data showing high levels of depression and anxiety alongside gaps in care. The rapid development of digital health interventions offers tremendous opportunity to flexibly engage and meet the needs of HCW. In particular, novel approaches such as messaging therapy have been extremely popular for overcoming difficulties in accessing usual forms of care.

The current presentation focuses on a cohort of 1873 HCW from multiple US states who engaged in messaging therapy during the COVID-19 pandemic starting from March 2020. We will present results on treatment engagement and response, and an overview of the themes emerged during treatment using Natural Language Processing (NLP).

First, we will discuss HCW utilization and dropout rates during messaging therapy, including: frequency of contact, typical hours, number of messages, number of words, and use of multimedia content. Secondly, we will examine reductions to depression and anxiety symptoms during messaging therapy, as measured through PHQ-9 and GAD-7 scales. We will present data suggesting clinically significant improvement in HCW (with clinician-diagnosed primary anxiety and depression) from baseline (PHQ-9: M=13.36±4.95; GAD-7: M=13.35±4.09) to 12-weeks (PHQ-9: M=8.65±5.96; GAD-7: M=8.27±5.13). Lastly, we will present the NLP analysis of messaging therapy transcripts, identifying the most frequent stressors reported during COVID-19, as well as linguistic patterns associated with remission and poor treatment outcomes.

How Messaging Therapy Was used as a Public Health Intervention in Reno, USA
Amy Cirbus, PhD, LMHC (Talkspace)

COVID-19 was the catalyst for individuals and families experiencing mental health challenges in unprecedented numbers. The need for accessible mental health services across towns and
cities nationwide increased beyond immediate capabilities. People struggled to manage their mental health as they simultaneously managed unforeseen personal, career, financial and familial challenges. The city of Reno Nevada, specifically, saw rising numbers of people reaching our mental health support who were unable to get the help they needed. By using CARES Act funding, the city undertook a public health initiative to offer accessible digital mental health care for every resident.

We will examine the results of this public health intervention to study the impact of messaging therapy to individual and community mental health. The presentation examines the factors that allowed for this solution to address a large-scale mental health need, how government bodies can manage to incorporate mental health as part of their overall health initiatives, and discuss utilization and individual outcomes. Using aggregate data, we will specifically discuss who used the service, reasons for seeking treatment, treatment outcomes, and overall impact.

Further implication will be discussed, including: how data from this novel opportunity provides a lens through which we can better understand large scale public mental health initiatives and how the uses of virtual therapy can solve for gaps in available and accessible treatment delivery.

**Messaging Therapy: How well does it work? And for whom?**

Thomas D. Hull, PhD (Talkspace)

Message-based psychotherapy is a novel delivery method that has the potential to solve problems of access and scale while preserving the benefits of individualized treatment and the therapy relationship as we have seen in the preceding presentations. But how effective is it generally, as well as for different populations, and does it live up to its promise in delivering clinical outcomes?

Research on this delivery method is new, but is rapidly growing and has focused on outcomes among a variety of diagnostic categories, treatment approaches, and demographic groups. A review of the effectiveness literature suggests that clinical outcomes for messaging therapy are reliable and replicable for individuals with depression, anxiety, and PTSD, as well as for individuals in rural and urban centers. When using unsupervised machine learning methods, between four and six outcome trajectories have been identified that are predicted by demographic and platform usage metrics. Comparing the clinical effect of modality (e.g., daily messaging vs. weekly video sessions) in both archival data and randomized controlled trials, also suggests similar clinical efficacy with a boost in engagement and more scalable practitioner time for the messaging arm.

Lastly, translation of particular therapies to this new delivery medium is an important undertaking. The adaptation of Cognitive Processing Therapy (CPT) to messaging therapy for PTSD has demonstrated significant promise.

**How Digital Mental Health Growth Post-COVID Suggests Therapy in Writing is Not Just a 'Crisis Time' Intervention: A Look At The Current Landscape Of Digital Therapy & Psychiatry**

Kate L. Rosenblatt, MA, LPC, LMHC (Talkspace)

Prior to COVID, client sign-up data shows that digital therapy has been increasing in popularity. The pandemic expedited the adoption of telemedicine in general, and telemental health in particular. Expanding therapy via technology platforms has democratized mental health care by reducing traditional barriers to therapy, and increasing the accessibility and affordability compared to traditional in-person therapy.

Many are wondering if tele-mental health is here to stay in a post-COVID world. Since most therapists worldwide have adopted tele-therapy, and clients continue to seek tele-mental health options, this indicates that digital health was not just a ‘crisis time’ intervention. While some may return to in office visits post-pandemic, research shows the effectiveness of digital therapy for individuals, couples, and groups. Furthermore, client data suggests that many people prefer digital therapy in writing compared to digital live video sessions; asynchronous messaging via audio, video, or text is a popular feature in digital therapeutics, signifying today’s population want more than traditional therapy can offer.

Telepsychiatry has also been an emerging option both pre-COVID and today. At Talkspace, we have seen the growth of both our teletherapy and telepsychiatry offerings during COVID. As a digital healthcare company providing digital therapy and digital psychiatry, all care is delivered through Talkspace’s easy-to-use and fully encrypted web and mobile platform, consistent with HIPAA and other state regulatory requirements.