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# The impact of COVID-19 on addiction treatment in New Zealand

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## ABSTRACT

COVID-19 public health measures, including lockdowns, have disrupted psychological service delivery for substance use and behavioural addictions. This study aimed to examine how addictions treatment had been affected by COVID-19 related factors from the perspective of addiction and mental health service providers. Participants (n = 93) were experienced service managers and clinicians in New Zealand who completed an online survey. Clinicians reported increased presentations for problems related to internet gambling (n = 57, 61%), gaming (n = 53, 57%), social media use (n = 52, 56%), and pornography (n = 28, 30%). A qualitative analysis of responses generated six themes. Themes included service management and increased administrative burden, and service delivery reconfiguration. Access improved for some clients because of convenience and reduced structural barriers. However, online service delivery was problematic for those with unstable or no internet access and devices that could not support video conferencing and/or lack of safe, confidential or private spaces at home. Increased client complexity and restricted in-person care prompted changes to focus, and content of clinical interventions, and some respondents offered more frequent but shorter appointments. Clinicians who provided services by phone or email, rather than video conferencing, reported treatment was less effective, with reduced rapport and engagement a contributing factor. The New Zealand addictions sector has responded to COVID-19 by increasing treatment access through distance-based options. Maintaining multifaceted models of care that are agile to rapidly changing environments presents unique challenges but is critical to addressing the needs of people impacted by addiction.

## 1. Introduction

COVID-19 has significantly disrupted mental health and addictions services. Public health requirements such as social distancing and stay-at-home orders have limited in-person interactions. Under these conditions, options have included postponing treatment or shifting to a distance-based service model involving the internet, phone or postal-based delivery (also referred to as e-mental health, e-therapy or e-counselling). From a client perspective, distance-based treatment may address structural or systematic barriers due to its flexibility and convenience. Online delivery also addresses personal barriers such as shame and stigma due to greater physical or personal anonymity (Dilkes-Frayne, Savic, Carter, Kokanović, & Lubman, 2019; Johnson et al., 2021; Lal & Adair, 2014; Park, Wilkinson-Meyers, King, & Rodda, 2021; Rodda, Lubman, Dowling, Bough, & Jackson, 2013; Rodda, Lubman, Dowling, & McCann, 2013). To date, there is limited evidence on the effectiveness of distance-based interventions in the COVID-19 context,

including as a stand-alone treatment. Cross-sectional and qualitative studies suggest that clinicians are receptive to distance-based treatment but report challenges associated with reduced social presence and its effects on the therapeutic relationship and clinical practice (Cipolletta & Mocellin, 2018; Ekström & Johansson, 2019; Rodda et al., 2019).

The shift to distance-based service delivery has resulted in new models of care with associated challenges for the addictions workforce. A recent global survey of 177 addiction medicine specialists reported that 59% of treatment and harm reduction services (e.g., overdose and needle and syringe programs) were operating as telemedicine at the start of the pandemic. Other services have reported similar changes to delivery mode, with moves to online delivery for opioid substitution programs (Samuels et al., 2020), twelve-step (Penfold & Ogden, 2021) and SMART Recovery groups (Liese & Monley, 2021). Surveys of clients seeking psychological addiction treatment report restricted access due to service closures, reduced operating hours and a shift to distance-based delivery for substance use (Russell et al., 2021) and problem gambling

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services (Marionneau & Järvinen-Tassopoulos, 2021). Public health restrictions have prompted clinical experts to call for a reconfiguration of psychological treatment services to incorporate distance-based delivery (Cantor, Stein, & Saloner, 2020; Du et al., 2020; Dunlop et al., 2020; Galea-Singer et al., 2020; Shreffler, Shreffler, Murfree, & Huecker, 2021). To date, however, no study has focused on the actual clinical impact of COVID-19 on the delivery of psychological addiction treatment.

The current study examines mental health and addiction service responsiveness to COVID-19 public health measures in Aotearoa, New Zealand. During the study period (March 2020 to June 2021), the New Zealand community has had few to no cases of COVID-19. During this time, there were two long lockdown periods (approximately 11 weeks in total) with stay-at-home orders and minimal community movement (e.g., no food deliveries, essential services only). The New Zealand Ministry of Health instructed mental health and addiction services to provide online or phone services, with urgent and crisis community mental health continuing to operate as usual within public health guidelines (Ministry of Health, 2021). In this context, the present study aimed to understand providers' experiences of distance-based service delivery for alcohol and other drugs (AOD) and behavioural addictions (gambling, gaming, internet and pornography) during COVID-19 lockdowns in New Zealand.

## 2. Methods

### 2.1. Recruitment and procedure

Participants were recruited from substance use (alcohol and other drugs or AOD), behavioural addictions (gambling, gaming and pornography) and mental health services in New Zealand. Psychological addiction treatment is provided free of charge in New Zealand in community-based and residential settings. The largest providers of services are funded for AOD or gambling only, with rural health care services providing a combination of AOD, gambling and mental health treatment. Approximately 30% of services are operated by Māori, Pacific and Asian people and are targeted towards these groups due to their over-representation of addiction-related harm (Government Inquiry into Mental Health Addiction, 2018). Clinicians and service managers (n = 90) were emailed with study information and a link to the 20-minute Qualtrics survey. Clinicians who completed the survey received a \$40 shopping voucher. The University of Auckland Human Participants Ethics Committee approved the study (ID: UAHPEC3449).

### 2.2. Measures

The survey requested demographic characteristics (age, gender), education, years of work experience, workplace location, and the primary focus of their service (e.g., substance use, gambling). Additional survey items measured perceived changes in the presentation of problematic internet behaviours, including internet gambling, gaming, pornography, and social media, since the outbreak of COVID-19. Clinicians completed two open-ended questions related to the impact of COVID-19 on service delivery, inclusive of what worked well and what did not work well. There was no word count restrictions on these responses.

### 2.3. Data analysis

A series of chi-square and t-tests were conducted to compare characteristics across service types and the rate of presentations of internet-enabled addictions. As this was an exploratory study, we explored open text data on clinical responsiveness to COVID-19 with reflexive thematic analysis (Braun & Clarke, 2019). Responses to open-ended questions were read and re-read with codes allocated during this process. Theme generation occurred through multiple rounds of coding that organised

data into structural or systemic factors (e.g., service configuration) and individual client and therapist factors (e.g., engagement and rapport). Member checking involved four clinicians who provided feedback on the interim findings. The results present the number and percentage of participants who mentioned the theme and indicative quotes to highlight experience.

## 3. Results

### 3.1. Demographics and client presentation

The sample consisted of 93 clinicians that delivered treatment for behavioral addictions (n = 57, 61%), alcohol and other drugs (AOD) (n = 48, 52%), mental health (n = 20, 22%), and youth and adolescents (n = 17, 18%). Clinicians reported their role as service manager (n = 8), psychologist, counsellor, or therapist (n = 25), AOD worker (n = 24), social worker (n = 10), case management (n = 6), nursing/medical (n = 5) and other (n = 15). As indicated in Table 1, clinical roles were a combination of AOD or behavioral addictions only or a combination of these in addition to mental health treatment. The average age of clinicians was 44 years (SD = 12.9), and 63% (n = 59) were female. Almost half of the sample held a post-graduate degree in psychology or social work (n = 44, 47%) with an average of 10 years (SD = 7.1) of clinical experience working with addictions. Clinicians were from major urban areas, including Auckland, Wellington and Tauranga (n = 65, 70%), with 30% (n = 28) spanning Kerikeri (north) to Invercargill (south). Thirty per cent (n = 28) of services were specifically targeted to Māori, Pacific or Asian populations. Clinicians used between zero (n = 6) and three or more (n = 18) different distance-based options for treatment delivery following the outbreak of COVID-19 (M = 1.87, SD = 0.9). The most frequent approach was video conferencing with Zoom, Skype, Teams or Facebook Messenger (n = 61, 66%), phone (n = 56, 60%), text messaging (n = 23, 25%), email (n = 10, 11%) and postal mail (n = 2, 2%).

Clinicians reported that client presentations related to internet-enabled addictions had increased since COVID-19. Presentations increased for internet gambling (n = 57, 61%), gaming (n = 53, 57%) and problems associated with social media use (n = 52, 56%). The remaining clinicians reported no change or a decrease in these problems. There were significant differences in the frequency of clinicians reporting increased client presentations for all internet-enabled problems. As indicated in Table 2, increased presentations for internet gambling were reported by 82% of behavioural addiction clinicians but just 45% of AOD and 12% of youth workers. One-third (30%) of clinicians reported increased presentations associated with problematic pornography use. Youth workers reported increased gaming and pornography presentations more frequently than AOD only or AOD and behavioural clinicians.

### 3.2. Experiences of treatment provision during COVID-19

Clinicians provided a total of 271 responses to the two open-ended questions on their experiences of service provision during COVID-19. Thematic analysis generated six themes related to facilitators to treatment and a range of challenges and opportunities related to service provision during COVID-19 lockdown. As indicated in Table 3, themes included facilitators and challenges to service management, service delivery, treatment focus and content, access and equity, treatment setting, and perceived effectiveness.

#### 3.2.1. Service management

The most immediate impacts of COVID-19 on providers were rapid changes to daily operations, namely service management. Service management (mentioned by n = 31 clinicians) related to administrative and delivery aspects impacted by COVID-19 public health measures. Although participants noted improved efficiency due to reduced

**Table 1**  
Sociodemographic details by primary type of service provision (n,%).

	AOD and MH (n = 10)	Behavioral only (n = 28)	Youth (n = 17)	MH & addiction (n = 10)	AOD & Behavioral (n = 17)	AOD only (n = 11)	X or F	p
Age (M, SD)	47 (13.4)	51 (10.0)	38 (14.9)	42 (13.8)	41 (11.9)	44 (10.3)	3.161	0.012
Gender (Female)	4 (40)	19 (68)	14 (82)	5 (50)	10 (59)	7 (64)	6.161	0.291
Post-graduate degree	6 (60)	16 (57)	8 (47)	3 (30)	5 (29)	6 (55)	1.018	0.412
Experience (years) (M,SD)	9 (6.2)	12 (8.6)	7 (4.3)	12 (10.8)	10 (5.1)	10 (4.7)	1.011	0.420
Major urban area	3 (30)	18 (64)	12 (71)	6 (60)	16 (94)	10 (91)	15.500	0.008
Culture-specific (yes)	1 (10)	3 (11)	–	5 (50)	16 (94)	3 (27)	49.272	<0.001

**Table 2**  
Rate of presentation for behavioural addictions across service types (n,%).

	AOD and MH (n = 10)	Behavioral only (n = 28)	Youth (n = 17)	MH & addiction (n = 10)	AOD & Behavioral (n = 17)	AOD only (n = 11)	X or F	p
Increased internet gambling	7 (70)	23 (82)	2 (12)	7 (70)	13 (76)	5 (45)	30.261	<0.001
Increased gaming	7 (70)	17 (61)	14 (82)	7 (70)	3 (18)	5 (45)	18.632	0.045
Increased social media	8 (80)	18 (64)	14 (82)	7 (70)	–	5 (45)	33.238	<0.001
Increased pornography	4 (40)	8 (29)	11 (65)	3 (30)	–	2 (18)	27.037	0.003

clinician travel time, increased capacity, and reduced waiting lists due to new modalities, there were several challenges. There was a requirement for flexible service delivery to be continually adjusted to comply with current public health advice. Some service options stopped or were postponed because providers could not move them online sufficient lead time or resourcing (e.g., home visits, group-based treatment). Online delivery increased compliance-related administration tasks (e.g., tracing, cleaning) and the need for new online forms, assessments and protocols. Staff rosters were changed to meet demand patterns, and all supervision and staff meetings were moved online. The personal impact on clinicians included social isolation and fatigue due to screen use and social isolation.

*Online delivery has allowed increased capacity for technology-assisted engagement and therapy, such as video calling and therapeutic phone calls (Youth work AOD)*

*I don't love staring at a screen 4–5 h/day and have concerns that it may not be as healthy as one would like (Pornography counsellor)*

### 3.2.2. Service delivery

Service delivery changed whereby clinicians reported distance-based treatment resulted in new patterns of appointment scheduling (n = 36). The stay-at-home order allowed for greater flexibility, where clients had increased availability for appointment times. Appointments were scheduled more frequently (e.g., twice weekly) and for a shorter duration of time. There were also reports of reduced non-attendance at the first appointment, attributed to ease of access and reduced embarrassment. For services that reverted to in-person delivery, some noticed increased cancellations due to COVID-19 and flu-like symptoms, which meant the client was not permitted to attend their session in person.

*Having options available to clients meant increased flexibility in regards to times and length of sessions. (AOD only counsellor)*

*COVID-19 has required us to be flexible according to client need in order to deliver treatment. (Mental health and addiction counsellor)*

Delivery during COVID-19 involved a combination of text, chat, and video conferencing and traditional distance-based methods such as phone and postal mail. New work methods aimed to improve engagement in the session using other websites, apps, video, text, virtual whiteboards, and emailed resources. Two clinicians noted they could connect clients with more appropriate experts from across New Zealand (e.g., culture, language) and other options such as 12-step groups that became accessible to those in remote areas.

### 3.2.3. Treatment focus and content

Most notably, clinical focus and content changed during lockdown periods (n = 62). There was an increased focus of treatment on (i) anxiety and depression, (ii) internet-enabled addictions and (iii) uptake of new modes of gambling. Client presentations also became increasingly complex, including finances, housing, family violence and problems with food and shelter. One service reported that lockdown had a positive change to consumption patterns.

*About 50% of our clients reported they felt relieved at having gambling venues closed and the opportunity to be with whanau (family), and repay debt. I also heard from AOD workers how they were pleasantly surprised that drug use dropped and their clients didn't abuse their takeaways [substitution pharmacotherapy] as much as expected. (Service manager gambling)*

Some clinicians noted that more regular treatment helped people feel less isolated or anxious. The shift towards shorter and more frequent appointments meant increased capacity to maintain connection and contact throughout lockdown.

*Connecting with clients over the lockdown period was vital as they were pretty isolated, very depressed, and highly stressed. (AOD and gambling counsellor)*

*The repeated connection with clients demonstrated that we care and we are still with them in their recovery. (Social worker AOD)*

### 3.2.4. Access and equity

Accessibility of treatment was impacted for many clients during lockdown (n = 87). Residential treatment services continued to operate but at reduced capacity. Psychological services shift from in-person to online meant that treatment access could be instant and convenient for many clients. Clinicians reported that the barriers to attending, such as concerns about privacy, transport, time, and readiness, were removed for some clients. Online delivery also allowed services to attract a different cohort, such as young people or clients in hard-to-reach or remote locations. Some clients with anxiety preferred online delivery as it was easier for them to engage.

*Attendance increased as delivery became convenient to the client - we "came" to them instead of coming to see us. (Gambling counsellor)*

*Some people, who are sensitive about their privacy, preferred online sessions. If face-to-face had been the only available option, they might not have had the benefits of counselling. (Gambling counsellor)*

## Summary of the impact of COVID-19 on addictions treatment.

Theme	Facilitators to treatment	Challenges and opportunities
Service management	There was improved staffing efficiency due to reduced travel time. Reduced waiting lists and increased capacity to reach new and existing clients.	Continuous adjustment of service delivery and rostering was needed to adhere to public health advice. Increased administration to comply with health advice. Some options were not available online because of insufficient notice/time to prepare. There was an impact on clinician mental health due to isolation and fatigue.
Service delivery	Shutdowns prompted greater flexibility of appointment scheduling (more frequent and shorter duration) and reduced non-attendance at the first appointment. New multi-modal delivery options emerged with a combination of text, chat, video, post and phone.	There were increased cancellations when reverting to in-person treatment which resulted from public health orders to stay at home and get tested if experiencing flu-like symptoms. Options such as 12-step groups became accessible to remote areas. Clients and cultural or content-specific experts could now easily connect across the country.
Treatment focus and content	Increased connection due to more frequent appointments helped clients feel less isolated or anxious. Increased focus on anxiety and depression, internet-enabled addiction and new modes of gambling.	There was increased complexity related to housing, family violence, food and shelter and finances.
Access and equity	Distance-based delivery meant instant and convenient access. Barriers such as concerns about privacy, transport, time, and readiness, were removed for some clients. Services could attract a new cohort of clients such as young people or those in remote areas.	Reduced capacity in residential treatment. Access and equity issues due to limited home internet, insufficient broadband or mobile data, low download speed or a lack of devices that could support video conferencing. The home treatment setting had frequent interruptions, lack of safe or private space.
Engagement and rapport	Clinicians reported greater client autonomy when working online. Clients were willing to share more about themselves and go deeper than in-person interactions.	Assessment and screening of physical indicators were more complicated than in-person, especially for those who did not use video conferencing. There were concerns that the interaction was too relaxed and lacked intensity.
Perceived effectiveness	Services that changed their model of care during lockdown periods retained distance-based options when restrictions lifted.	Services that did not use video conferencing were less satisfied due to the absence of visual cues. Provision of services only by phone and text often focused on check-ins rather than therapeutic work. Some providers limited their work to harm reduction until in-person work could continue.

*Zoom services were running well. Clients were accessible, flexible with timing, and able to engage from home.* (Mental health and addictions manager)

Distance-based service provision increased access for some clients, but it posed significant barriers for people already suffering through lockdowns. Barriers to care included limited or no home internet access, insufficient broadband or mobile data, low download speed, no webcam or video-capable phone or device and low technical proficiency. Sessions were not always smooth with reports of technological challenges related to unstable or slow internet connection and frequent dropouts,

particularly in regional areas. Many challenges resulted from the client's financial position or remote location that excluded clients from video conferencing and accessing online groups and individual treatment.

*During the lockdown and even now, clients who were not familiar with Zoom struggled to engage.* (AOD counsellor)

*For clients who are not so technologically able, Zoom has been a challenge - connecting, setting it up in the first place.* (Gambling counsellor)

Clients' home environments impacted the quality and accessibility of treatment. Although distance-based treatment was convenient and easy for clients to access from home, a safe, private or quiet space was often unavailable. Reduced privacy and confidentiality related to the presence of children and others who could overhear clinician-client interaction. Frequent interruptions were a problem. Clinicians said it was helpful to pre-empt distraction and plan for quiet and private space.

*Many different factors come into play in a house where there is no space to be fully in the group and not be disturbed.* (AOD and gambling counsellor)

*What worked well really depended on the client being able to prepare in advance and getting distractions out the way more than anything I did.* (AOD worker)

### 3.2.5. Challenges to engagement and rapport

Engagement and rapport were challenging when treatment modality swapped between in-person and at a distance (n = 39). Those that did not use video conferencing noted that the absence of visual cues was a significant limitation to assessment and treatment delivery which relied on observation (e.g., intoxication). Interventions such as those involving whole families were complex without physical presence. For instance, it was challenging to see the faces of multiple clients in one session. Similarly, two clinicians providing culturally specific programs reported that effective delivery was challenging at a distance.

Some clinicians found establishing rapport and relationship development was more challenging when not engaged face-to-face. Two youth workers were concerned that the interaction was too relaxed and that it was not sufficiently intense. There was a concern that clients had too little accountability and that the treatment was not strong enough to prompt change. Conversely, five clinicians reported that clients had greater autonomy as working online and from home supported greater control over the session. Some clinicians stated that clients shared more about themselves and were willing to go deeper than in-person interactions.

*Using Zoom rather than meeting face-to-face made it challenging to keep clients grounded in their treatment, hold them accountable for their commitments, and connect with them properly during mental health slumps.* (Mental health and addictions counsellor)

*Paternalistic attitudes towards AOD clients were challenged when shifting to online delivery.* (AOD Service Manager)

*Young people are more able to articulate themselves thoughtfully and with less social pressure.* (Youth worker)

### 3.2.6. Perceived effectiveness of treatment

Perceived treatment effectiveness was related to the modalities used for distance-based service provision (n = 17). Clinicians using video conferencing and a combination of tools reported a positive experience for clients whereby treatment gains were maintained or continued to evolve. Clinicians relying on phone and text reported that these options were acceptable for check-ins when in-person treatment was not permitted. Eight clinicians explicitly stated a preference for in-person treatment and stopped providing distance-based treatment when in-person was possible. Two clinicians purposefully limited treatment to harm reduction only with the view of holding the person until in-person sessions were possible. In response to stay-at-home orders, some services

changed their overarching model of care to incorporate distance-based treatment. These services could then maintain an enhanced model, which included distance-based options beyond lockdown periods. The decision to continue with distance-based options appeared informed by the value of working with multi-modal options.

*When COVID-19 lockdowns were in place, treatment was limited to no contact—Zoom, telephone meetings, mostly. Since lockdown restrictions have ended, we are back to face-to-face contact. (AOD counsellor)*

#### 4. Discussion

The present study was the first to examine the experiences of mental health and addiction service providers during a COVID-19 outbreak. The mental health and addictions sector in Aotearoa-New Zealand has demonstrated great flexibility in overcoming COVID-19 related challenges to service delivery. Service providers created new tools, processes, and protocols for online delivery with limited support or training at very short notice, sometimes within 24 h. These findings are consistent with a recent New Zealand inquiry that recommended major expansion to treatment access ([Government Inquiry into Mental Health Addiction, 2018](#)). Despite the responsiveness and agility of services to adapt to online delivery, some clients still experienced significant treatment barriers. There was sometimes a lack of essential resources to engage with clinicians at a distance, including internet availability and equipment suitable for video conferencing. Further, clients' home environments were not always conducive to treatment delivery, with some without access to a private, quiet space during appointments.

The current study reported changes to client presentations across internet-enabled problems. Approximately 60% of clinicians reported increased internet gambling, gaming and social media presentations. This finding was consistent with [Sallie, Ritou, Bowden-Jones, and Voon \(2021\)](#), who reported that stay at home orders were associated with increased screen time and gaming engagement. Similarly, COVID-19 had seen an increase in online gambling when land-based venues were closed ([Lindner, Forsström, Jonsson, Berman, & Carlbring, 2020](#)). Across our sample, clinicians providing youth services more frequently reported increased pornography-related presentations. These findings were consistent with other studies also reporting pornography use increased during lockdown periods ([Sallie et al., 2021](#)).

#### 5. Future directions and limitations

Our study describes the sudden, disruptive impact of COVID-19 on mental health and addiction service delivery. Disruption to traditional approaches to treatment can establish a 'new normal' for delivery that is readily adaptable and flexible to meet the needs of clients. Though the sample was limited to approximately 10% of the available New Zealand workforce ([Roche et al., 2018](#)), it included representation from this sector (alcohol, drugs, gambling, pornography, gaming and youth and mental health) regions and cities. This recruitment strategy is a strength of the study, and we noted differences in perspectives between different services and roles. For example, the use of multi-modal service delivery was more common for youth services and likely reflective of the significantly younger age of the workforce (and therefore comfort with technology). Cultural-specific services more often identified client challenges with internet and device access, but this was an issue across the sample. Although these findings suggest salient issues confronting clinicians, these results should be treated with caution given the absence of quantitative assessment to determine the scope of impact on clinical practice. For example, most services likely interacted with clients by phone, but contact was administrative and not therapeutic and therefore not reported. Moreover, there was little discussion on the effectiveness of distance-based treatment in symptom improvement or reduced consumption of the addictive substance/behaviour. Future studies may

consider assessing client change according to treatment modality and understanding consumer experiences of distance-based treatment.

A key finding from this study was that clinicians delivered treatment with the aid of technology - rather than delivering a technology-based multi-modal treatment program. The temporary shift to distance-based options partly reflects government directives to health services, with video conferencing permitted on a case-by-case basis or where in-person appointments were not practical or available ([Ministry of Health, 2021](#)). COVID-19 has impacted service delivery not just during periods of lockdown; anxiety and hypervigilance meant many developed a preference for distance-based help. This shift appeared to reduce treatment barriers resulting in a higher number of first session presentations and more frequent appointments of shorter duration. Whether these changes are helpful to clients in managing internet-enabled addictive behaviours is still to be determined.

The present study suggests that online mental health and addiction support delivery is essential in the current COVID-19 context. In practical terms, clinicians in this study identified the value of providing clients with internet data plans and mobile phones loaded with apps and websites to support treatment engagement. Further, guidelines and resources may benefit clients in managing the treatment space in the home, notwithstanding some of the intractable challenges associated with delivering a service in this way. Multiple clinicians identified issues around privacy and confidentiality because of stay-at-home-orders. Some recommended practical solutions, such as scheduling family walks during treatment time or providing the client with headphones to take a walk and therefore reduce the chances of others overhearing the conversation. Given the ongoing challenges presented by COVID-19, establishing multifaceted models of care that are agile enough to rapidly adapt and support clients in person or from a distance are critical to supporting mental health.

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#### Author contribution

Author A conceived the study and obtained funding. Author A and B designed the survey and Author B managed data collection. Author A conducted the data analysis and prepared the first draft of the manuscript. Author C and D provided substantial input into the design and subsequent drafts of the manuscript. All authors reviewed and approved the final paper.

#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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#### References

- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589–597.
- Cantor, J., Stein, B. D., & Saloner, B. (2020). Telehealth capability among substance use disorder treatment facilities in counties with high versus low COVID-19 social distancing. *J. Addict. Med., 14*(6), Article e366.

- Cipolletta, S., & Mocerlin, D. (2018). Online counseling: An exploratory survey of Italian psychologists' attitudes towards new ways of interaction. *Psychotherapy Research*, 28(6), 909–924.
- Dilkes-Frayne, E., Savic, M., Carter, A., Kokanović, R., & Lubman, D. I. (2019). Going online: The affordances of online counseling for families affected by alcohol and other drug issues. *Qual. Health Res.*, 29(14), 2010–2022.
- Du, J., Fan, N., Zhao, M., Hao, W., Liu, T., Lu, L., ... Lan, X. (2020). Expert consensus on the prevention and treatment of substance use and addictive behaviour-related disorders during the COVID-19 pandemic. *General Psychiatry*, 33(4), Article e100252.
- Dunlop, A., Lokuge, B., Masters, D., Sequeira, M., Saul, P., Dunlop, G., ... Haber, P. (2020). Challenges in maintaining treatment services for people who use drugs during the COVID-19 pandemic. *Harm Reduction Journal*, 17(1), 1–7.
- Ekström, V., & Johansson, M. (2019). Sort of a nice distance: A qualitative study of the experiences of therapists working with internet-based treatment of problematic substance use. *Addiction Science & Clinical practice*, 14(1), 1–11.
- Galea-Singer, S., Newcombe, D., Farnsworth-Grodd, V., Sheridan, J., Adams, P., & Walker, N. (2020). Challenges of virtual talking therapies for substance misuse in New Zealand during the COVID-19 pandemic: An opinion piece. *The New Zealand Medical Journal (Online)*, 133(1515), 104–108.
- Government Inquiry into Mental Health Addiction. (2018). He Ara Oranga: Report of the government inquiry into mental health and addiction: New Zealand Government New Zealand. Retrieved online from: <https://mentalhealth.inquiry.govt.nz/inquiry-report/he-ara-oranga/>.
- Johnson, S., Dalton-Locke, C., San Juan, N. V., Foye, U., Oram, S., Papamichail, A., ... Shah, P. (2021). Impact on mental health care and on mental health service users of the COVID-19 pandemic: A mixed methods survey of UK mental health care staff. *Social Psychiatry and Psychiatric Epidemiology*, 56(1), 25–37.
- Lal, S., & Adair, C. E. (2014). E-mental health: A rapid review of the literature. *Psychiatric Services*, 65(1), 24–32.
- Liese, B. S., & Monley, C. M. (2021). Providing addiction services during a pandemic: Lessons learned from COVID-19. *Journal of Substance Abuse Treatment*, 120, Article 108156.
- Lindner, P., Forsström, D., Jonsson, J., Berman, A. H., & Carlbring, P. (2020). Transitioning between online gambling modalities and decrease in total gambling activity, but no indication of increase in problematic online gambling intensity during the first phase of the COVID-19 outbreak in Sweden: A time series forecast study. *Frontiers Public Health*, 8.
- Marionneau, V., & Järvinen-Tassopoulos, J. (2021). Treatment and help services for gambling during COVID-19: Experiences of gamblers and their concerned significant others. *Nordic Studies on Alcohol and Drugs*, 14550725211030727.
- Ministry of Health. (2021). COVID-19: Mental health and addiction providers. Retrieved from <https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-no-vel-coronavirus/covid-19-information-health-professionals/covid-19-mental-health-and-addiction-providers>.
- Park, J. J., Wilkinson-Meyers, L., King, D. L., & Rodda, S. N. (2021). Person-centred interventions for problem gaming: A stepped care approach. *BMC Public Health*, 21(1), 1–12.
- Penfold, K. L., & Ogden, J. (2021). Exploring the experience of Gamblers Anonymous meetings during COVID-19: A qualitative study. *Current Psychology*, 1–14.
- Roche, A., Kostadinov, V., Braye, K., Duraisingam, V., McEntee, A., Pidd, K., & Nicholas, R. (2018). *The New Zealand addictions workforce: Characteristics & wellbeing*. Retrieved from Adelaide: National Centre for Education and Training on Addiction, Flinders University..
- Rodda, S., Lubman, D. I., Dowling, N. A., Bough, A., & Jackson, A. C. (2013). Web-based counseling for problem gambling: Exploring motivations and recommendations. *Journal of Medical Internet Research*, 15(5), Article e99.
- Rodda, S. N., Lubman, D. I., Dowling, N. A., & McCann, T. V. (2013). Reasons for using web-based counselling among family and friends impacted by problem gambling. *Asian Journal of Gambling Issues and Public Health*, 3(1), 1–11.
- Rodda, S. N., Merkouris, S., Lavis, T., Smith, D., Lubman, D. I., Austin, D., ... Dowling, N. A. (2019). The therapist experience of internet delivered CBT for problem gambling: Service integration considerations. *Internet Interventions*, 18, Article 100264. <https://doi.org/10.1016/j.invent.2019.100264>
- Russell, C., Ali, F., Nafeh, F., Rehm, J., LeBlanc, S., & Elton-Marshall, T. (2021). Identifying the impacts of the COVID-19 pandemic on service access for people who use drugs (PWUD): A national qualitative study. *J. Subst. Abuse Treat.*, 129, Article 108374.
- Sallie, S. N., Ritou, V. J., Bowden-Jones, H., & Voon, V. (2021). Assessing online gaming and pornography consumption patterns during COVID-19 isolation using an online survey: Highlighting distinct avenues of problematic Internet behavior. *Addict. Behav.*, 123, Article 107044.
- Samuels, E. A., Clark, S. A., Wunsch, C., Keeler, L. A. J., Reddy, N., Vanjani, R., & Wightman, R. S. (2020). Innovation during COVID-19: Improving addiction treatment access. *J. Addict. Med.*, 14(4), e8–e9.
- Shreffler, J., Shreffler, M., Murfree, J. R., & Huecker, M. (2021). A global pandemic and substance use disorder: Healthcare professionals' viewpoints on the merging of two crises. *Substance Use & Misuse*, 56, 1476–1482.