

Original Research

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An Exploratory Evaluation of Implementing a Rapid-response Online Mental Health Service During the COVID-19 Pandemic: A Mixed Methods Study from India

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Abstract

Objectives: Strict social distancing and lockdown measures imposed to curb transmission during the early phase of the outbreak of the COVID-19 pandemic posed challenges to people's psychological wellbeing, limited access to social support, and disrupted routine mental health service delivery. In response, a consortium of mental health stakeholders from Goa, India launched the COVIDAV program, which provided pro-bono virtual psychiatric and counselling consultations across India through an online platform. This study describes the acceptability and feasibility of the program from the perspective of various stakeholders.

Methods: Data were collected via a survey with clinicians who had volunteered on COVIDAV ($n = 40$), in depth interviews of the clinicians ($n = 14$), and focus group discussion with key collaborators ($n = 1$). Process data were mapped at various stages during the online platform's development and use. The qualitative and quantitative data was analysed using thematic analysis and a descriptive analysis respectively.

Results: Over 17 months, 63 clinicians conducted 2245 online sessions through the COVID platform, primarily accessed by youth across the country. The clinicians acknowledged the online platform's ability to enhance access and reduce stigma. Challenges included session time constraints, connectivity issues, and user interface inconsistencies that interfered with clients' accessibility to the services. High satisfaction rates amongst the service providers were reported, with 79.3% content with the service provision and 82.8% with pro bono contributions through the platform.

Conclusions: This study illustrates the feasibility, flexibility, and applicability of a rapidly designed pro-bono online platform for delivering mental health care services through the collaboration of stakeholder groups in the mental health care, private, social, and governmental sector. Our findings highlight the potential of rapidly deployed digital platforms, developed via cross-sector partnerships, to meet mental health care needs during unprecedented global emergencies such as the COVID-19 pandemic.

In March 2020, the World Health Organization declared the COVID-19 global pandemic, following which the Government of India imposed measures such as lockdowns, quarantines, and stringent social distancing norms as preventive measures against community transmission.

The prevailing conditions led to apprehension about COVID-19 and its transmission, concerns of safety, lack of access to basic amenities,¹ concerns related to health of family members, financial consequences of the lockdown,² and general uncertainties pertaining to the pandemic resulting from sudden imposition of restrictions such as curfews and quarantine.³ These challenging circumstances increased the risk of mental health problems emerging or worsening in the population.

Over time, the pandemic resulted in adverse mental health implications for all age groups across the world,^{4–6} including India.^{7,8} Globally, there was a 25% increase in depression and anxiety as a result of the pandemic.⁹ Additionally, people reported contamination anxieties, high frustration, boredom, and loneliness resulting from the social distancing regulations.¹⁰ Finally, people affected with COVID-19 were subject to societal rejection, discrimination, and stigmatization.¹¹

During the preventative lockdown, there was limited accessibility to conventional forms of mental health care, such as health facility-based face-to-face consultations, and a disruption to

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the social mobility and connectivity amongst people. Consequently, virtual platforms, such as telepsychiatry, increasingly started becoming accessible and reliable ways of responding to the rising mental health concerns during the pandemic.¹² COVIDAV (details below) was one such example of an online counselling platform providing free video and audio consultations that was rapidly developed and deployed through a partnership between a professional society of psychiatrists, a private sector technology company, mental health non-profit organisations, private sector clinicians, and public sector health services from Goa, India.

The aim of this paper is to describe the experience of implementing COVIDAV during a global health emergency, and exploring its acceptability and feasibility from the perspective of various stakeholders involved in developing and delivering clinical services through the virtual platform.

Methods

Design

Mixed methods study which included a semi structured survey, in-depth semi-structured interviews, a focus group discussion, and process evaluation.

Setting and sample

While the program was initiated in Goa, the virtual nature of the intervention meant that people from any part of India could access the counselling services. All the clinicians who provided services on the platform belonged to the partnering organizations, including government, mental health, non-profit, and private organizations; and some were independent practitioners. They were mostly concentrated in Goa, but a few were from Delhi. They included psychiatrists, psychologists, and experienced lay counsellors. The key stakeholders who set up the platform and supervised its functioning were also Goa-based. Everyone contributed services pro-bono.

The service provider characteristics have been summarised in Table 1.

COVIDAV Program

The platform was rapidly developed by a Goa-based start-up (Octointernet) and a stakeholder group that comprised representatives from a local professional society of psychiatrists, public health service, and mental health non-profits. The service providers were volunteer lay counsellors, psychologists, and psychiatrists. Lay counsellors are professionally trained persons from the community who have no specialist training or qualification in mental health. The platform received referrals from the state's quarantine centres, as well as self-referrals from the general public.

The platform enabled clients to seek help online by filling a brief questionnaire that collected information about clients' concerns for which they were seeking help, session time preference, preferred language (to receive the session), and contact number. On receipt of the request, a session link was created and sent via email to the pool of service providers. As soon as any of the clinicians "picked up" the session by accessing the link – it became automatically inactive for other clinicians. This process was adopted to facilitate the fastest possible response time to a request. The platform also allowed for cross referrals amongst the clinicians (e.g. from a psychologist to a psychiatrist for a consultation or prescription of medications). All the services provided through the platform were completely free.

Table 1. Sociodemographic description of survey participants (N=40)

Age	N	%
18–30 years	11	27.5
31–40 years	15	37.5
41–55 years	14	35.0
Gender		
Male	5	12.5
Female	35	87.5
Highest educational qualification		
Graduate	3	7.50%
Post Graduate Diploma	7	17.50%
Post Graduate Degree	28	70%
PhD	1	2.50%
Other	1	2.50%
Employment		
Government employee	7	17.5
Private employee	11	27.5
Non Govt Organisation employee	19	47.5
Unemployed	1	2.5
Other	2	5
Professional Role		
Psychiatrist	10	25
Psychologist	17	42.5
Psychotherapist	2	5
Counsellor	10	25
Other	1	2.5

Weekly meetings were scheduled with the service providers, supervisors (senior psychiatrists with more than 10 years of clinical experience), and technical support team to discuss client cases and resolve challenges related to using the platform. The service providers received training on responding to commonly encountered distress and risk of suicide; and were provided updated information on COVID-19 guidelines. The technical team was available throughout the day to resolve any technical problems encountered by the service providers. In addition to this, online resources were made available on general mental wellbeing, depression, anxiety, grief, and bereavement. This dissemination information was developed based on common issues reported by clients during counselling sessions.

Information about the platform was widely disseminated on social media and received coverage in the mainstream news media. The platform remained active throughout the lockdown and ceased operations when the lockdown restrictions were lifted and access to routine services resumed.

Data

Anonymised data from the backend of the platform were extracted to study the usage statistics, basic demographic profiles of the users, and pattern of help seeking. An online semi-structured survey was administered to all the clinician volunteers who delivered services

on the platform. It sought to collect information about the demographic profile, motivation to participate, hurdles faced during service delivery, suggestions for improvement, etc.

In-depth interviews (IDIs) were conducted with a subset of these clinicians identified using convenience sampling strategy. The interview guides were designed to understand the acceptability and feasibility of COVIDAV platform as an emergency response to the increasing mental health needs of the population. The service providers were asked about their perceptions about pro-bono counselling experience of using COVIDAV as an online mental platform to counsel people during the pandemic including its technical aspects.

A focussed group discussion (FGD) was conducted with key stakeholders who were involved in setting up the platform to explore the motivation, barriers and facilitators in setting it up. Three trained researchers, Kimberley Monteiro (KM), Brinda Singh Raikwar (BSR), and Devika Gupta (DG) conducted the IDIs and the FGD in English. The service providers were interviewed in person, either at the research office or at their own clinic, or through online conferencing. All interviews were audio recorded and then transcribed.

Analysis

Platform usage data and the survey responses were analysed using descriptive analyses. Qualitative data from the IDIs and FGD were analyzed using the thematic analysis approach.¹³ Two researchers, KM and Bijayalaxmi Biswal (BB), generated preliminary codes and grouped them into themes and sub-themes based on the original research questions and sections in the topic guide design. The reliability of the coding system was tested by carrying out blinded, double coding of 14 interviews and 1 FGD to reach a consensus on the preliminary codes and themes. The researchers (KM and BB) independently read through the transcripts to bring about a broad understanding of the potential themes and develop a codebook based on initial observations and notes. This was then reviewed by Ravindra Agrawal (RA) and Abhijit Nadkarni (AN), including RA listening to 3 recordings to understand the context in which the statements were made, discussing discrepancies, and applying revisions where needed. Transcripts were then coded using the updated codebook. Final codes were analysed by both researchers to identify common themes inductively. Finally, a narrative interpretation of the themes was developed, and illustrative quotes were selected.

Ethical considerations

Ethical approval for the study was obtained from the Institutional Review Board of the organisation that conducted the evaluation of COVIDAV. Informed consent was obtained from all participants.

Results

Platform Usage

The COVIDAV platform was active for a total of 17 months during the pandemic starting from April 2020 until August 2021. During this period, a total of 2245 sessions were delivered to 1220 individuals. There was greater traffic during the initial months coinciding with the lockdown, during which access to conventional in-person consultations was severely restricted. As the number of persons seeking help on the COVIDAV platform dwindled, it was decided to cease operations by August 21 (Figure 1). The platform was primarily accessed by young adults, the average age being 26 years, with an almost equal gender distribution of clients (Females 48.5%). The commonly reported concerns were anxiety, low mood, heightened stress levels, contamination anxieties, feeling of isolation and loneliness, COVID related anxieties, etc (Figure 2).

Volunteer Survey

Of the 63 clinicians who provided services through the platform, 40 (63.5%) responded to the survey. 35 (87.5%) participants identified as female and the rest as male. The mean age of the participants was 34.56 (Standard Deviation [SD] 7.84) years. Majority of the participants were either psychologists or psychiatrists, and the mean years of experience of all participants was 7.06 (SD 3.39). Table 1 provides a detailed sociodemographic description of the participants.

40% participants had no prior experience of delivering sessions online prior to using the COVIDAV platform. 79.3% participants reported being satisfied or highly satisfied with the platform's ability to provide services, and 82.8 % reported being satisfied or highly satisfied delivering pro-bono services through the platform (Figure 3). 12% of participants each expressed a desire to return to delivering in-person service after the lockdown or deliver only online services, while the rest (76%) wanted to progress to a mix of online and in-person services.

In-depth interviews were conducted with 14 service providers – 6experienced lay counsellors and 8experienced psychologists with a Master's degree in psychology. 13 (86.7%) of the participants identified as female. The mean age of the participants was 34.9 (SD 7.1) years and mean years of experience was 7.0 (SD 3.5). We also conducted an stakeholder FGD with key members of the organizing team which led the setting up of the COVIDAV platform. This included senior mental health specialists from the public sector ($n = 3$), private practice ($n = 1$), and civil society ($n = 1$), each having more than 2 decades of clinical experience. The following sections describe the motivation, setting up of the COVIDAV platform, and its acceptability and feasibility, with recommendations for further improvement.

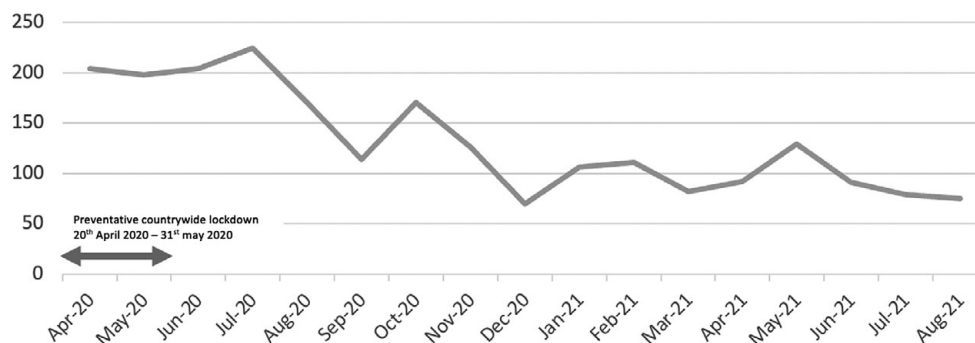


Figure 1 Number of sessions conducted on the COVIDAV platform.

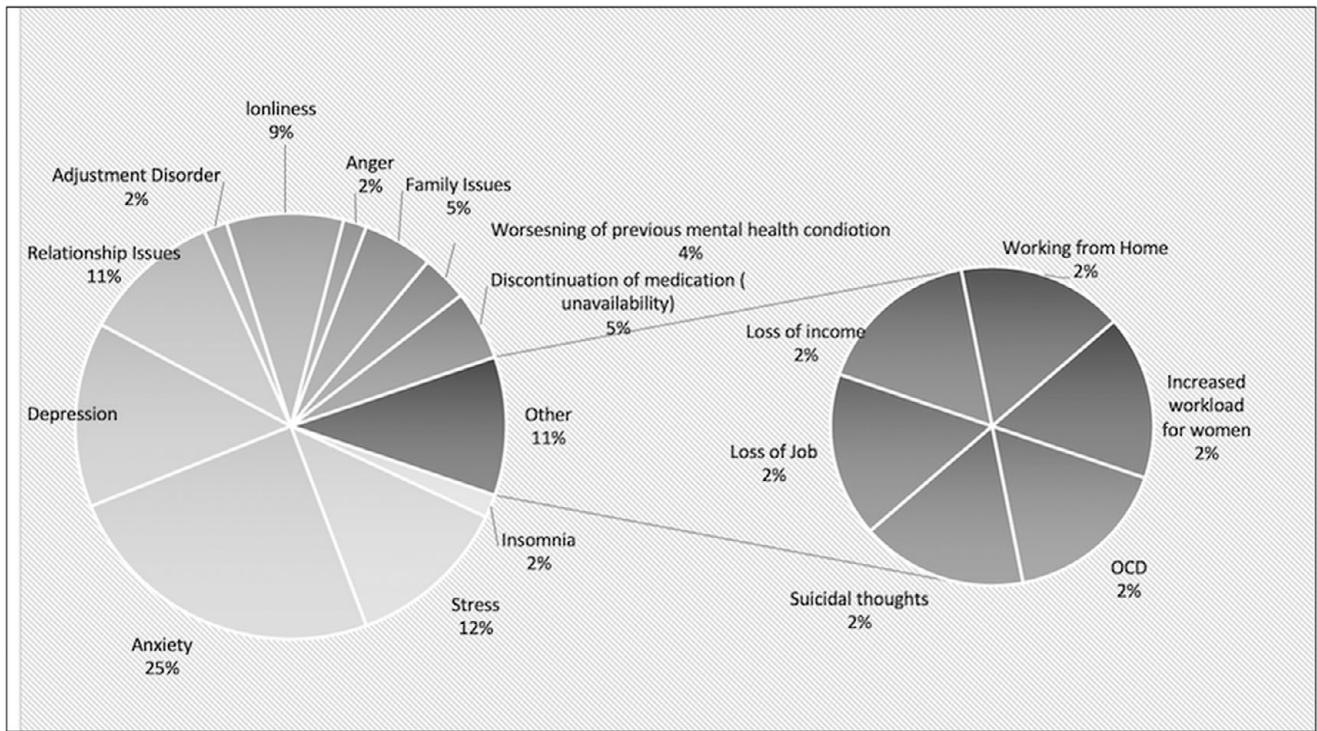


Figure 2 Common reasons for which clients sought help.

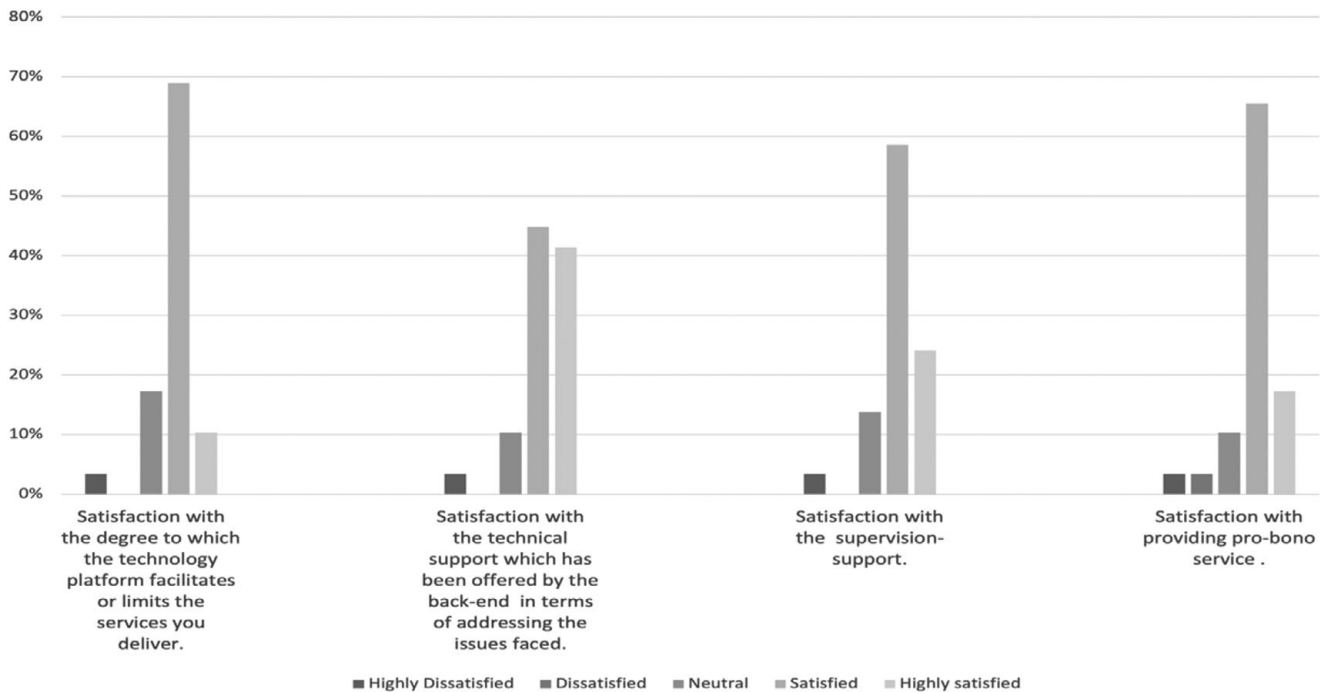


Figure 3 Satisfaction levels amongst service providers (volunteer clinicians).

Motivation and setting up of the platform

The proposal to offer pro-bono services to mental health clinicians had elicited a significant and enthusiastic response when the program was first initiated.

“Due to the lock down, I was at home and wanted to do something. When I came to know that Sangath was leading on this, I was very happy and joined the platform” (Psychologist, 14 years’ experience).

“To me it felt like a call of duty and I was very happy to join this” (Psychologist, 7 years’ experience).

“.. the fact is that we all were a little traumatised by this (pandemic and the lockdown) and wanted to do something about it” (Stakeholder FGD).

During this health care emergency, various agencies worked together to rapidly put together a workable platform, which would have been difficult under normal circumstances.

“The most striking part of this was that the public sector, private sector, IT and civil society came together very quickly and without anyone having to push. In normal times, it is very difficult to achieve this unless there is some kind of incentive to those involved” (Stakeholder FGD).

“We really did not have to get the volunteers motivated... there already was a lot of internal motivation. Through the weekly supervision meetings and the WhatsApp groups we problem-solved as and when necessary. The tech developer was always at hand” (Stakeholder FGD).

Several stakeholders reported that the co-ordination amongst themselves aided in easier functioning of the pro bono services. *“.. despite people from various backgrounds working on this together, there was not a single conflict”* (Stakeholder FGD).

“.. normally we don't look forward to meetings (in their routine jobs).. but we looked forward to the advisory meetings.. the supervision sessions were led by rotation” (Stakeholder FGD). In a conventional context, the technological platform would have necessitated significantly more time for its development. But during this emergency when the platform was launched it got rapid iteration. *“..we worked with the tech company to develop the flow.. appointment system, referral system.. we got inputs from diverse sectors”* (Stakeholder FGD).

“We worked with the tech developer to make the landing page's interphase intuitive to navigate. We wanted to ensure that clients could book an appointments with minimum of clicks” (Stakeholder FGD).

The platform also got a boost due to the rapid development of guidelines by the government, as well as the support received from policy makers. *“Government launched the telemedicine guidelines which enabled the acceptance of e-prescriptions.. this gave us a lot of confidence that what we are doing is legally supported”* (Stakeholder FGD).

Acceptability

The clinicians reported several advantages of providing counselling through the online platform, both from the clients' perspective (e.g., easier accessibility to care and comfort) and their own perspective (e.g., ability to provide services to a wider network of clients and comfort).

“Clients could join therapy from the comfort of their home so I think it was more convenient for them as compared to offline therapy” (Psychologist, 8 years' experience).

Few clinicians perceived no difference between online and in-person sessions, and challenges, if any, were addressable. *“I don't think there is too much of a difference between in person and online sessions. Online video calling sessions I mean. Because you are in the end seeing each other. Yes, you might miss certain body movements that lend themselves to interpreting clients' experiences within the therapy setting, but that can be worked around”* (Psychologist, 8 years' experience).

On the other hand, a clinician reported that interpretation of non-verbal cues was *‘like relearning therapy altogether’*. *“Many a times if the client chose to keep the camera off - I had to rely on the voice tone and the pauses in between... this was a new experience for me”* (Psychologist, 14 years' experience). Many others reported difficulties in terms of establishing rapport, reviewing homework assigned to clients and lack of a confidential and a controlled environment. *“When you sit in a confidential space or a silent room, audio is good but if clients are outdoors or in a noisy environment, we cannot control the background noise, and this affects the session quality”* (Lay counsellor, 8 years' experience).

Some clinicians reported that the online service helped address the barrier of stigma.

“.. it helps address the stigma that people usually had earlier to walk into clinics. So, I think it is a great way for people to access therapy” (Psychologist, 3 years' experience).

One of the participants with prior experience in online counselling felt that the pandemic contributed to a shift in patients' acceptance of this mode of care. *“I was actually offering online services even before COVID, but people were not open to the idea of online counselling but once people accepted the idea that COVID is going to be here, a lot of in-person clients moved online”* (Psychologist, 8 years' experience).

Many of the clinicians with no prior experience of delivering services online reported contentment delivering services via this platform.

“I have 7 years of experience and have specialised in child and adolescent services. I was apprehensive at the start about conducting online sessions. However, I found it to be satisfying and I was glad that I could offer my services online” (Psychologist, 7 years' experience).

Feasibility

Client commitment

The clinicians encountered obstacles around client attendance, client expectations, and technical impediments in utilizing various platform features. *“The issue that I faced was that clients would book appointments, but not turn up”* (Psychologist, 8 years' experience).

Some clinicians attributed the frequent unpunctuality of clients to the pro-bono nature of the service. *“When people pay for sessions, they tend to come on time”* (Psychologist, 8 years' experience). *“Pro-bono sessions are not taken seriously by the clients... commitment level to therapy is lesser”* (Psychologist, 8 years' experience).

Similarly, some clinicians reported that the online medium may have been less conducive/supportive for the completion of homework tasks assigned to the clients as part of the therapeutic work. *“Sometimes we can't send them [Homework]. Sometimes they can't send back to us their completed homework for review. That is a major challenge. Whereas we can review this very easily and interactively in face-to-face sessions, so this is our challenge when using the online platform”* (Counsellor, 8 years' experience).

Internet issues

Numerous clinicians expressed encountering several challenges related to internet connectivity. Frequent call-drops affected rapport with the patient, caused hinderances in the flow of the conversation, and made it particularly challenging to support patients who expressed suicidal ideation. *“Sometimes when you are in a flow of things and you are sharing a thought, the network would go off. This kind of breaks the momentum. This would never happen in an offline session”* (Lay Counsellor, 8 years' experience).

A considerable number of the clinicians had to resort to conducting sessions by disabling the video functionality option, while at other times the calls could not be made on the internet at all and the session was conducted on a regular phone call. These audio-only sessions resembled telephonic counselling, diverging from video sessions that bore greater resemblance to in-person interactions. *“Many times, it would happen that we didn't have network range to connect to the site, so we would call the client and talk on the phone”* (Psychologist, 5 years' experience).

Scheduling of appointments and unfamiliarity with online medium

Many clinicians took it upon themselves to overcome client's unfamiliarity with the platform by orienting the clients prior to the scheduled session, to help them navigate the platform. "We used to call the client in advance and instruct that 'you must go to the platform, log in and select that option'. We used to guide them through the steps" (Psychologist, 8 years' experience).

If the clients faced challenges logging in despite the orientation, clinicians mitigated the situation by sharing their phone number and going ahead with a telephonic session. One of the participants felt that the platform should have been modified to be more accessible to those who are not well versed with technology, to tackle such situations. "Clients used to find it difficult to navigate the platform, especially if they were elderly people. That consumed a little bit extra effort. The back end should be designed in such a way that one can navigate easily" (Psychologist, 5 years' experience).

The COVIDAV platform had features of "no show" and rescheduling. The former would cause the session to end automatically if it had not begun within 10 minutes of the scheduled time slot. Many clinicians reported that this proved to be a hassle. "If you did not begin the session on time and were 5-10 mins late due to network issues, the appointment would have ended. So, to reschedule the session was a pain" (Psychologist, 10 years' experience). Moreover, the re-scheduling feature was not used by many of the participants who instead opted for telephonic counselling to continue the sessions.

In response to the feedback received from the clinicians delivering the sessions during the weekly scheduled meetings with the organisers of the platform, new features were implemented. Some service providers found it difficult to keep track of these if they missed the weekly meetings.

"I was aware that they are making changes in response to our feedback. It was difficult to keep track of this. If I missed one or two meetings then I would be clueless about the new feature" (Psychologist, 7 years' experience).

Limitations of an emergency online mental health response

Because COVIDAV was an online service intended to help persons in mental health distress during the pandemic (i.e., it was not a replacement for conventional mental health service), the time allocation per session was initially limited to 30 minutes. Later, it was increased to 45 minutes, as the additional requirements of navigating internet issues and orienting the client with the platform resulted in the actual session being curtailed and sub-optimal. "The session was 45 minutes. The (technical) glitches and bad internet from my or client's side would mean, the 45 mins would get over by the time we started having the session" (Psychologist, 8 years' experience).

Though initially conceived to be a service for COVID related distress - some clients sought help for their interpersonal distress and non-covid related psychological issues. Many called in to ask about quarantine guidelines and COVID protocols. Many clients wanted a long-term engagement with the clinicians. "...a challenge was that many times people accessing the platform wanted to continue the engagement with the counsellor.. asked for private consultations. This was an ethical dilemma for us. We decided that if a client requested this - the counsellor has to inform this in writing and that no private consultations would be delivered through the platform" (Stakeholder FGD).

Implementation of Feedback to Improve Utility of Online Platform

Language preference

Clinicians suggested that appointments are allotted to clinicians after taking client details, such as preferred language, into consideration, owing to limitations imposed by language barrier in rapport building. "If you are looking at people from all over the country, you need to figure out which language the clinician or client is comfortable with" (Lay Counsellor, 13 years' experience). Hence, a feature was inserted into the registration form to determine their language preference.

Equitable distribution of cases

As described earlier, the platform's appointment booking process was based on fastest-finger-first principal to facilitate the fastest possible response time. Partly because of the enthusiasm of the clinicians to help and partly because of their ready "availability" due to lockdown, the response time to "pick up" a session link was quite short. Some clinicians who accessed their emails regularly or were more available would pick up the sessions frequently. This resulted in many clinicians not getting as many sessions as they would have wanted to.

"We had a first come, first serve basis of allotting slots like the 'fastest finger first' system. A lot of the same clinicians were taking up the appointments very quickly and the others were getting demotivated because they were not getting any clients. For us as organisers, we wanted the quickest response time" (Stakeholder FGD).

Clinicians hoped that the appointments were distributed equally among practitioners instead of a first-come first-serve basis. This was also addressed by the core team running the platform by instituting a rota system.

Follow up and referral

Participants felt that the cross-referral process needed to be made simpler for the service providers. "Sometimes, we used to refer clients to psychiatrists. If that process would have happened more smoothly, it could have eased the process" (Lay Counsellor, 13 years' experience).

Some participants felt that the platform should have had an easier process for follow up sessions and that it was difficult to ascertain the effectiveness of the platform through a single session. "You need to have a few sessions to understand the effectiveness. But most clients we could see for single sessions as follow up were difficult to coordinate on the platform" (Psychologist, 3 years' experience). Hence, a dedicated feature allowing the clinicians to refer internally to another clinician (e.g., counsellor referral to a psychiatrist for assessment and prescribing medications if needed) and a feature to book a follow up appointment was added.

Recommendation for Future Improvement

Participants suggested incorporation of a feature that would prompt clients to confirm their scheduled slot before the session. This could help with mitigating instances of no-shows and prevent the allocated time slot from being unused. This would, thus, also relieve the clinicians from the task of making reminder calls to confirm client availability prior to the session. "I have seen during my clinical practice that once you have fixed an appointment, maybe sending out a reminder one hour or one day prior would ease the

process and you would get a confirmation if the client is joining so that you don't waste the slot" (Psychiatrist, 8 years' experience).

Furthermore, it was suggested that clients be provided the option of receiving the session from other platforms familiar to them to prevent drop-out. "We can just ask the caller that if you don't plan to join, please tell us in advance. We can give them options: if they prefer WhatsApp call or normal call, multiple options to connect" (Lay Counsellor, 9 years' experience).

Another clinician appreciated that this platform was set up rapidly during the pandemic and did help in delivery of mental health care, but she felt that it was clumsy to use on a smartphone as it was a browser web application. She suggested that an easy to use mobile application would be appropriate.

COVIDAV was neither intended nor equipped to be a conventional clinical service. Participants expressed the need for distinguishing patients looking for immediate support from those expecting a psychotherapy session and felt that this needed to be addressed during public facing communications about the limits of this service. "When we disseminate a program, it should be clear what we can deliver" (Psychologist, 3 years' experience).

Discussion

This study was an exploration of the rapid deployment of an online mental health service during a global health emergency. We have attempted to triangulate the experiences of implementing this service by deploying quantitative and qualitative research methods.

Our findings were consistent with the evidence base that clinicians find no difference in overall quality, better treatment effectiveness,¹⁴ and express satisfaction with its use,¹⁵ and are in sync with the pattern of surge in telemedicine consultations during the COVID pandemic,¹⁶ especially for depression care.¹⁷

Most of the participating clinicians expressed high levels of satisfaction in delivering pro-bono services through an online platform during the pandemic. The time to uptake of a request for help was very short and many clinicians "complained" about not being able to get enough workload, as the fastest-finger-first mechanism resulted in some clinicians picking up more sessions. This issue was later addressed by way of "spreading out" the clinicians through a rota system. Similarly, the requests by the clinicians for increasing the duration of the sessions and that by clients and clinicians for "repeat scheduling" of sessions between the same clinician-client pair are indirect indicators of the acceptability of the COVIDAV platform (tele-consultations) to receive care during the pandemic.

It has been documented that the design and development of digital health systems for mental health care requires joint interdisciplinary research and efforts of computer scientists and developers, as well as psychologists and psychiatrists.¹⁸ Our successful implementation of this initiative was the seamless cooperation between the various stakeholders – the mental health clinician community, civil society organisations, private practitioners, and the government health systems. The participating stakeholders and the clinicians who offered service pro-bono were "emotionally" driven to help fellow humans during the time of crisis. This is driven by a sense of obligation, social commitment, and skill growth and mutual help.^{19,20} There was doing away of procedural delays in favor of an intent to problem solve (e.g., the timely policy interventions by the government during the COVID-19 pandemic, such as the Telemedicine Practice Guidelines²¹ and the Telepsychiatry Operational Guidelines).²² The COVIDAV platform also received

favorable dissemination in the local print and electronic news media, which probably contributed to the help seekers accessing help from a wide geographic area.

The rapid deployment of the pro-bono services on this online platform enabled persons who were either quarantined, under treatment, and even those who were unaffected to access help from their homes in a safe manner without breaching the COVID-19 protocols. Barriers to implementation were issues of internet connectivity, poor digital literacy amongst both service-providers and service-users, and lack of comfort with this tool by some clinicians. High speed internet connectivity is inconsistent in India, more so in rural areas, resulting in difficulties faced by the clinicians in conducting a video consultation. However, whenever that happened, the clinicians improvised and would shift to an audio only phone call. There were also the usual issues of "no show" when the client would not turn up for the session at the stipulated time slot, which was probably also because the sessions were always free.

One key limitation to our study is that we could not interview the users of the service, which limits a balanced evaluation of the platform. Lastly, it needs to be acknowledged that although the digital technological solution such as the COVIDAV platform improved availability of mental health care during the lockdown, it was not available to those did not have access to digital technology (i.e., it could not help those who did not have phones, smartphones, laptops, etc.) and those who did not have internet access.

Conclusion

During health calamities, digital technology can be successfully deployed to provide access to mental health care. Crisis is an excellent motivator for players from varying sectors to come together and rapidly deploy needed services. However, after deployment, the digital innovation will need to be responsive to the needs of the stakeholders (service providers and service users) and be able to rapidly iterate based on field experience.

References

1. Najeer SS, George LS. Experiences and challenges faced by the working population during COVID-19 Lockdown: a qualitative study. *J Family Med Prim Care*. Feb 2022;11(2):660–666. doi:10.4103/jfmpc.jfmpc_1483_21
2. Riddhi L, Sushma S, Avinash De S. Various Facets of Anxiety during the Pandemic in India - Critical Issues. In: Fabio G, Floriana I, eds. *Anxiety, Uncertainty, and Resilience During the Pandemic Period*. IntechOpen; 2021:Ch. 2.
3. Gathiya N, Kumar S. Psychosocial implication of quarantine and lockdown during COVID-19 pandemic in India. *J Educ Health Promot*. 2020;9:363. doi:10.4103/jehp.jehp_666_20
4. Luo Y, Chua CR, Xiong Z, et al. A systematic review of the impact of viral respiratory epidemics on mental health: an implication on the Coronavirus Disease 2019 pandemic. *Front Psychiatry*. 2020;11:565098. doi:10.3389/fpsy.2020.565098
5. Panda PK, Gupta J, Chowdhury SR, et al. Psychological and behavioral impact of lockdown and quarantine measures for COVID-19 pandemic on children, adolescents and caregivers: a systematic review and meta-Analysis. *J Trop Pediatr*. 2021;67(1). doi:10.1093/tropej/fmaa122
6. Stuijzand S, Deforges C, Sandoz V, et al. Psychological impact of an epidemic/pandemic on the mental health of health care professionals: a rapid review. *BMC Public Health* 2020;20(1):1230. doi:10.1186/s12889-020-09322-z
7. Rehman U, Shahnawaz MG, Khan NH, et al. Depression, anxiety and stress among Indians in times of Covid-19 lockdown. *Community Ment Health J*. 2021;57(1):42–48. doi:10.1007/s10597-020-00664-x

8. Roy A, Singh AK, Mishra S, et al. Mental health implications of COVID-19 pandemic and its response in India. *Int J Soc Psychiatry*. 2021;67(5): 587–600. doi:10.1177/0020764020950769
9. Organization WH. COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide. Accessed June 30, 2024. <https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide>
10. Serafini G, Parmigiani B, Amerio A, Aguglia A, Sher L, Amore M. The psychological impact of COVID-19 on the mental health in the general population. *Qjm*. 2020;113(8):531–537. doi:10.1093/qjmed/hcaa201
11. SeyedAlinaghi S, Afsahi AM, Shahidi R, et al. Social stigma during COVID-19: A systematic review. *SAGE Open Med*. 2023;11:20503121231208273. doi:10.1177/20503121231208273
12. Mondal I, Anand N, Sharma MK, et al. Telephonic psychotherapy in India: A reminder of challenges in times of COVID-19. *Asian J Psychiatr*. Oct 2020;53:102432. doi:10.1016/j.ajp.2020.102432
13. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101. doi:10.1191/1478088706qp063oa
14. Donelan K, Barreto EA, Sossong S, et al. Patient and clinician experiences with telehealth for patient follow-up care. *Am J Manag Care*. Jan 2019; 25(1):40–44.
15. Rametta SC, Fridinger SE, Gonzalez AK, et al. Analyzing 2,589 child neurology telehealth encounters necessitated by the COVID-19 pandemic. *Neurology*. 2020;95(9):e1257–e1266. doi:10.1212/wnl.00000000000010010
16. Kumar A, Wadhwa A, Amol G. Perception of health care professionals (HCPs) on telemedicine in India. *Practice*. 2021;18:8.7.
17. Patel SY, Mehrotra A, Huskamp HA, et al. Variation in telemedicine use and outpatient care during the COVID-19 pandemic in the United States. *Health Aff (Millwood)*. 40(2):349–358. doi:10.1377/hlthaff.2020.01786
18. Čosić K, Popović S, Šarlija M, et al. Impact of human disasters and COVID-19 pandemic on mental health: potential of digital psychiatry. *Psychiatria Danubina*. 2020;32(1):25–31.
19. Bolin R. Disasters and long-term recovery policy: a focus on housing and families. *Review of Policy Research*. 1985;4(4):709–715.
20. Drexler R, Hambrecht JM, Oldhafer KJ. Involvement of medical students during the Coronavirus Disease 2019 pandemic: a cross-sectional survey study. *Cureus*. 2020;12(8):e10147. doi:10.7759/cureus.10147
21. Council I. *Telemedicine practice guidelines enabling registered medical practitioners to provide health care using telemedicine*. Medical Council of India, New Delhi. 2020.
22. Math SB, Manjunatha N, Kumar CN, et al. *Telepsychiatry operational guidelines-2020*. Bengaluru: NIMHANS Pub. 2020.