

Impact of COVID-19 on mental health and social service provision in Singapore: Learnings from a descriptive mixed-methods study for future resource planning

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ABSTRACT

Introduction: COVID-19 restrictions and lockdown measures have led to impact on the mental health and social service delivery, including the rapid adoption of digital solutions to mental healthcare delivery in Singapore. This study aims to rapidly document the quantitative and qualitative impact of the pandemic restrictions on mental health and social services.

Method: This descriptive mixed-methods study consisted of a survey arm and a qualitative arm. Providers and clients from eligible mental health organisations and social service agencies were recruited. The respondents completed a survey on changes to their service delivery and the extent of impact of the pandemic on their clients. In-depth interviews were also conducted with representatives of the organisations and clients.

Results: There were 31 organisation representatives to the survey, while 16 providers and 3 clients participated in the in-depth interviews. In the survey arm, all representatives reported pivoting to remote means of delivering care during the lockdown. An increase in new client referrals and more domestic violence were reported from primary and community health partners respondents who made up 55.5% of health partners respondents. Three distinct response themes were recorded in the in-depth interviews: impact on clients, impact on service provision and impact on mental health landscape.

Conclusion: Two key findings are distilled: (1) mental health and social services have been challenged to meet the evolving demands brought about by the pandemic; (2) more societal attention is needed on mental health and social services. The findings indicate a necessary need for extensive studies on COVID-19 that can inform policies to build a more pandemic-resilient nation.

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INTRODUCTION

Coronavirus disease 2019 (COVID-19) was declared a global health emergency by the World Health Organization in January 2020.¹ Singapore reported its first case of COVID-19 on 23 January 2020 and the subsequent emergence of clusters led to a string of restrictions to contain the outbreak and protect the health of the public. The healthcare sector initially ramped

down non-emergency services to allow for the redeployment of resources for COVID-19-related services. In response to the widespread COVID-19 clusters,² a nationwide lockdown (known as “circuit breaker”) was implemented from 7 April to 1 June 2020, during which only essential services could continue operations and be kept open. Home-based learning was implemented, mask-wearing when leaving the home was

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CLINICAL IMPACT

What is New

- This descriptive mixed-methods study documents the extensive quantitative and qualitative impact of the pandemic restrictions on mental health and social services in Singapore during the height of the “circuit breaker” lockdown period.

Clinical Implications

- Findings from this study justifies the need for more societal attention on mental health and social services in the general population.
- The quantitative and qualitative data from this study can potentially inform and guide mental health and social service policies to build a more pandemic-resilient nation.

made mandatory, and leaving the home was only allowed for essential activities.³

The mental health of confirmed COVID-19 patients,⁴⁻⁶ quarantined cases,^{7,8} frontline workers,^{9,10} the general public¹¹⁻¹³ and persons with mental illness¹⁴ were inevitable casualties of these necessary public health measures as some studies have demonstrated. Chen et al.¹⁵ showed that the lockdown in the United Kingdom resulted in a decrease in mental health referrals to secondary care services, followed by a longer-term acceleration in the referral rate primarily for urgent or emergency referrals. Despite the restrictions on the provision of mental health and social services, staff working in these sectors innovated to continue service provision remotely, although this provision was only successful in some clinical situations.¹⁶ Singapore faced a similar situation during the “circuit breaker” in that community mental health and social service agencies (SSAs) were deemed non-essential services and had to cease face-to-face operations. The impact of such an acute change in services on clients and service providers had not been systematically measured.

There exist abundant reports of the rapid implementation of digital means of mental health services as a way of continuing service provision to high-risk and vulnerable populations.^{17,18} These digital adaptations of services include dissemination of mental health surveys, education and communication programmes, counselling services, self-help interventions and artificial intelligence-driven crisis interventions.¹⁹ Users of such services

have reported satisfaction and benefits,²⁰ and acknowledged them as the inevitable way forward for mental health care,^{21,22} although evidence of clinical efficacy remains preliminary.²³ There remain practical challenges on the ground, particularly in the Asian context.²⁴ Anecdotal experience in Singapore has indicated the pressure experienced by the sector to rapidly convert to online and remote means of continuing mental health and social services despite valid doubts about their utility and acceptability, and fears about their efficacy in preventing and intervening in mental health crises and emergencies.²⁵

There was an absence of local and international publications on the impact of COVID-19 on mental health services during the period from late 2020 to early 2021. A qualitative review conducted by Byrne et al.²⁶ on the impact of COVID-19 pandemic from a mental health perspective indicated a negative impact on people’s mental health, mental health services workforce and caregivers given greater strain, as well as the impact on psychiatric education, training and research. Studies on the pandemic and its related measures on mental health and social service provision in Singapore were far fewer. Therefore, a rapid documentation of quantitative and qualitative data on the impact of pandemic restrictions on mental health and social services was needed. By utilising a mixed methods approach, knowledge gaps regarding the utilisation patterns, successes and challenges of mental health and social services can be quantified and contextualised in order to inform policy changes on the current and future infectious disease outbreaks.

The research questions to be addressed in this study were (1) to identify the magnitude of the impact of the pandemic on mental health and social services at the organisational level, and (2) to explore the qualitative impact of the pandemic on the provision of mental health and social services.

METHOD

This descriptive mixed-methods study consisted of a survey arm and a qualitative arm. Ethics approval was obtained from the National Healthcare Group Domain Specific Review Board (ref 2020/00899).

Recruitment

This study adopted a convenience sampling methodology. All organisations and agencies in Singapore that provided mental health services (e.g. psychiatry, psychology) and social services (e.g. family counselling, senior activity centres) were eligible to participate in this study. An email invitation was first

sent to representatives of all eligible mental health organisations and SSAs to respond to the survey. Guidance on data collation was provided to these representatives. The recipients of the invitation could nominate themselves or another staff member to respond to the survey. The representatives were also concurrently invited to participate in the qualitative arm of the study and to refer their suitable clients to participate in the in-depth interviews to describe their experiences of accessing mental health and social services during the pandemic. Separate letters of invitation were provided to the clients to indicate their contact details. The providers and clients who indicated their interest in the qualitative arm of the study were then contacted by the study team members to obtain consent and to conduct the interview.

Data collection

A quantitative survey was administered to quantify the organisational and administrative changes due to the COVID-19 pandemic and the lockdown. The survey was completed either online on FormSG (secured online survey platform for public institutions) or in a Word document which respondents returned to the study team by email. Respondents for the survey first indicated the details of the services that their organisations provided (e.g. sector/department, acute/centre-based service, public/private organisation). Subsequently, they were asked whether there had been changes to their service delivery during the lockdown and the extent of impact of the pandemic on their clients (e.g. increase in crisis situations, need for further escalation).

In-depth interviews were conducted to explore the qualitative impact of the pandemic on the services and clients of the providers. Examples of the questions for the providers include “How has the pandemic impacted your work?”, “What COVID-19 measures have caused the most impact on your client?” and “What did you find helpful for you to reach out to your clients effectively?”. For clients, the questions were phrased to explore the impact and challenges that they personally face in accessing mental health and social services during the lockdown. The in-depth interviews were conducted using the Zoom platform. Informed consent was obtained individually by the interviewer and all participants consented to voice recording for transcription. One researcher (ZZSG) who had training and experience in qualitative methodologies conducted all the in-depth interviews. The data collection period was from 29 August 2020 to 1 February 2021 for the survey and between 20 October 2020 and 2 February 2021 for the qualitative interviews. The survey and interview

questions are available as Online Supplementary Materials.

Analytical method

Respondent organisations in the survey were categorised and analysed using the following groups: (1) restructured hospitals (comprising the psychiatry and psychology departments from tertiary hospitals), (2) primary and community health partners (PCHPs) (comprising polyclinics and nursing homes), and (3) SSAs. The survey responses were analysed using descriptive statistics.

The in-depth interviews were transcribed with the identifiers anonymised. The transcripts were first given a read-through and then coded inductively by authors ZZSG and KG. Qualitative data were coded using content analysis, in which the codes were categorised and grouped into higher order themes by 3 members of the study team.²⁷ All qualitative analyses were conducted using NVivo Release 1.0.²⁸

The findings from both the quantitative and qualitative arms were first described separately and thereafter combined to generate a more complete understanding of the impact of COVID-19 pandemic and its restrictions on mental health and social service delivery in Singapore.

RESULTS

Survey arm

There were 31 respondent organisations to the survey (9 restructured hospitals, 9 PCHPs, 13 SSAs). Of the PCHPs, 6 were from polyclinics and 3 were nursing homes. A mixture of SSAs participated in the survey (5 in mental health services, 3 family services, 3 dementia care, 1 addiction services, 1 LGBTQ+ services), although most of their services could overlap.

All respondents reported pivoting to remote means of delivering care during the lockdown, compared with about 50% before the lockdown. Comparing with respondents from the restructured hospitals and PCHPs, those from the SSAs group reported a greater proportion of their clients who had requested for an urgent or earlier appointment (restructured hospitals: <25%, PCHPs: <25%, SSAs: 25–50%) or were deemed not suitable for postponement of face-to-face appointment (restructured hospitals: 25–50%, PCHPs: <25%, SSAs: 51–75%).

No respondents from PCHPs reported an increase in clients who completed or attempted suicides. However, respondents from restructured hospitals and SSAs reported an increase in such clients (increase by 15.4–23.1%, Fig. 1). More than half of the respondents from both restructured hospitals and SSAs reported an

increase in hospitalisations for mental health reasons and exacerbations of pre-existing mental illnesses. Notably, the difference in the reporting of domestic violence from more than half of the respondents from PCHPs was more drastic than from the other groups (55.5% in PCHPs vs 22.2% in restructured hospitals and 7.7% in SSAs).

With respect to service use, there was no report of increase in the number of new clients from restructured hospital respondents, whereas more than a third of the respondents in both PCHPs and SSAs reported an increase in new clients (Fig. 2). In all 3 groups, there was a consistent trend in an increase of clients requiring more frequent follow-ups (55.5–66.6%) and reportedly an increase in the need for face-to-face interventions in restructured hospitals and PCHPs (66.6% and 77.7%, respectively). Respondents from SSAs also reported an increase in clients requiring further escalation or referrals to other mental health providers (61.5%).

Qualitative interview arm

A total of 16 providers and 3 clients from mental health and social services were recruited for the in-depth interviews. Of the providers, there were 6 psychologists (37.5%), 5 programme administrators (31.3%), 2 case managers (12.5%), 1 counsellor (6.3%), 1 social worker (6.3%) and 1 occupational therapist (6.3%). Majority of the providers were female (n=14, 87.5%). Seven of the providers served in the public sector, 5 were in the SSAs, while the remaining 4 were in the private or charity organisations.

Owing to the small sample size of clients (n=3; female, n=2, male, n=1), the main themes were identified from the provider interviews and, if relevant, corroborated and triangulated with the client accounts. Saturation was achieved after 2 provider interviews, as new themes did not emerge, and determined after a discussion within the study team. Altogether, the responses shared by

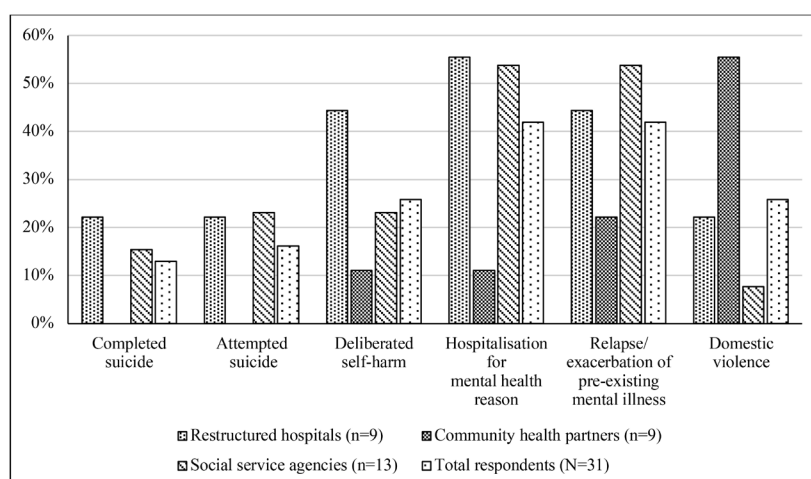


Fig. 1. Percentage of respondents reporting increase in crisis situations.

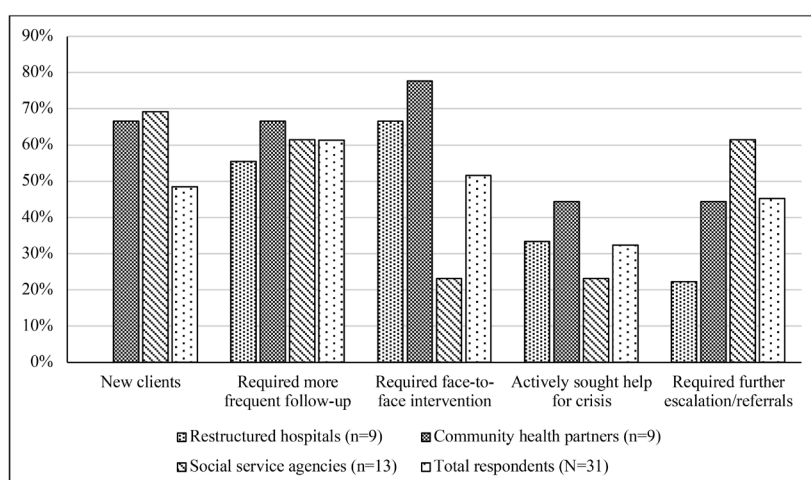


Fig. 2. Percentage of respondents reporting increased service use.

all participants showed 3 distinct themes: impact on clients, impact on service provision and impact on mental health landscape.

Impact on clients

With the challenges of COVID-19 and its associated precautionary measures, several impacts on the clients were raised. Five response subthemes were identified from the provider interviews: (1) COVID-19 restrictions

bringing about more challenges to clients' mental health (2) social-related impact; (3) domestic issues; (4) caregiver impact; and (5) demonstration of social support and resilience (illustrative quotes in Table 1).

The providers shared about how COVID-19 had brought more challenges to the profiling of their clients. They noted an increase in severity of anxiety and obsessive-compulsive disorder symptoms in their clients during the initial phases of the pandemic. Some of

Table 1. Subthemes and illustrative quotes of theme 1: Impact on clients.

Subthemes	Illustrative quotes
Increased challenges with COVID-19	“when the numbers were climbing, the anxiety of having COVID themselves... the clients might feel... the anxiety of catching the illness” – Provider O; female, mental health programme coordinator, social service “I felt that I should wear two [masks], because I felt safer that way and I was afraid... Back then I was still worried, and I still kept washing my hands... I felt that phase 1 and 2 were relatively challenging for me.” – Client 1; female “the situation looks like very scary also, you know, especially what—cannot sit here cannot sit there—literally you cannot go out. You know, there's a lot of restriction, I think it has an impact on some people's mental health.” – Provider K; female, counsellor, social service
Social-related impact	“quite a number of elderly live on their own... there's no one there to look out for them. At least like last time there's a lot of social service agencies and day care centres that elderly can go to” – Provider B; female, caseworker, charity organisation “these centres function as a respite for caregivers, and to also stimulate the seniors so that it will delay the cognitive decline” – Provider E; female, social work associate, social service
Domestic issues	“a lot of them came in with more... domestic-related interpersonal issues” – Provider J; female, psychologist, primary care “Mental health of my current patients and the patients that I see are a bit worse by having to stay at home. Some relationships at home like the domestic violence and conflict, it's much worse” – Provider A; female, social worker, public hospital “So there were a few cases with family violence, physical as well as verbal aggression shown by either one of the spouses” – Provider M; female, clinical psychologist, private practice
Caregiver impact	“couples and parents who had to manage not just like their own needs but they also had to take care of those that were depending on them as well, so I think it might have cause a lot of conflict as well.” – Provider B; female, caseworker, charity organisation “day care centre was actually quite overwhelmed during the circuit breaker because a lot of caregivers are trying to send their loved ones to day care... So they felt very frustrated that they have to manage caring for their loved ones and also work.” – Provider D; female, social work associate, social service “this time (I) was really (feeling) very down and the next thing is—my husband went to the day care centre so it is—shutting down so we have to stay home... So during the pandemic I also lost my job. So like, (I feel) more tensed up.” – Client 2; female, caregiver of patient with dementia
Demonstration of social support and resilience	“So for some, they have very strong familial support. That was actually a very strong protective factor for them... I think some of them also have that mental resilience, they know that this thing will eventually—they have hope that it will eventually get better.” – Provider D; female, social work associate, social service “For the elderly, they pretty much gone through the whole hard-knock life... So we get elderly coming in telling us “I'm very worried but what to do, life is like that”... so growing up with this kind of mentality, could have given them that sense of resilience – Provider J; female, psychologist, primary care “I think parents of kids with extra or additional needs, even if they are not so severe, already have a resilience that we don't appreciate enough, for them sometimes just getting their child to eat, put on socks, the things that they battle through every day is a lot, so I think they already have resilience in reserve.” – Provider N; female, occupational therapist, private practice

their clients shared about fear of COVID-19 exposure, excessive worrying and excessive prevention practices such as more frequent hand washing and double masking. Some providers also noted the difficulties in getting their clients who are cognitively compromised (e.g. people with dementia) to adhere to the COVID-19 measures, such as mask wearing and social distancing.

The providers also noted the social impact that their clients experienced from the COVID-19 measures. Particularly, the countrywide lockdown meant that the elderly and other residents that rely on physical venues for support (e.g. day care centres, leisure venues) lost access to these social resources, leading to increased feelings of isolation. Relating to the clients' inability to leave their homes, the providers shared about the increase in domestic issues and in caregiver burden that their clients faced during the lockdown period. Furthermore, some clients who experienced family violence still stayed with the perpetrators. Clients who were also caregivers had to care for both the elderly and their children, all while still working from home. These challenges imposed substantial mental stress on the clients, leading to more mental health issues.

The providers highlighted the importance of social support and resilience in their clients that could help alleviate the impact of the pandemic. Strong family support was reported to be a protective factor against feeling isolated. The providers also shared about the demonstration of resilience in their clients who had gone through the "whole hard-knock life" (Provider J) for the elderly, and in parents of special needs children who already had "resilience in reserve" (Provider N). The clients also demonstrated resilience by picking up new technological skills to access telehealth services, make bill payments and connect with family and friends. One client aptly shared that "there's good and there's bad" (Caregiver 2).

Impact on service provision

Guidelines from authorities were released frequently and changes had to be implemented by the providers almost immediately. These frequent changes in guidelines impacted the mental health and social service provision. Three response subthemes for the impact on service provision were noted: frequency of changes to guidelines, manpower difficulties and innovation in the online shift of services (Table 2).

The providers shared about how the organisations were not given enough time to adjust to the guidelines. As one provider shared, "within one week, certain instructions can change a few times, our work processes can change a few times" (Provider C). The numerous

rules and guidelines also led to some confusion and anxiety. Manpower issues were also reported by some providers who described an increased workload due to split-team arrangements and manpower redeployment. Consequently, motivation and morale of the team were affected owing to the increased pressure and workload.

The providers also shared about the need for their services to be delivered online to reduce the risk of exposure of their clients to the pandemic virus and shared about their experiences of learning to use the video-conferencing platforms. Some organisations started using the social media and video streaming sites to conduct workshops and engage their clients in activities. While these had been reported to be a convenient way of delivering the services, some providers doubted their effectiveness. The providers shared that, compared with face-to-face sessions, it was difficult to build rapport and look at non-verbal cues when the clients could not be seen beyond the screen. There were also doubts about clients being in a safe space without distractions during the virtual sessions, as many of them were attending the sessions from their homes, which might not be the safest space for counselling.

Impact on mental health landscape

Some providers shared that the creation of the National Care Hotline, a phone-in service for emotional and psychological support during COVID-19 by the ministries, was important in helping vulnerable individuals cope with the pandemic. Along the same vein, the providers noted a general increased awareness and recognition of the importance of mental health and its profession in the general population, with more people willing to step out to seek help. They highlighted that an overall greater awareness of mental health in the general population can reduce the impact of the pandemic (Table 3).

DISCUSSION

Integrating both quantitative and qualitative aspects of the study provided us with a more holistic understanding of the impact of the COVID-19 pandemic and its restrictions on mental health service delivery in Singapore. Two key findings are highlighted from the results of this study: (1) mental health and social services have been challenged to meet the evolving demands brought about by the pandemic; and (2) more societal attention is needed on mental health and social services.

Evolving demands due to the pandemic

First, all domains of mental health and social services have been challenged to meet the evolving demands

Table 2. Subthemes and illustrative quotes of theme 2: Impact on service provision.

Subtheme	Illustrative quotes
Frequency of changes to guidelines	“Every day there was new kind of measures and there were new things to consider or worry about... you’re not allowed to sit in a park, and then the next day you can, or you must one metre distance, and suddenly you had to wear masks... So that was a bit of anxiety provoking.” – Provider M; female, clinical psychologist, private practice “I think within one week, certain instructions can change a few times, our work process can change a few times.” – Provider C; male, case manager, public hospital “because there were so many advisories and so many rules that were set in place, it was very confusing to follow through this whole thing.” – Provider D; female, social work associate, social service
Manpower difficulties	“I think we have arranged to be 50% onsite at any point of the time... 50% will be on site then the other 50% will be working from home... we wanted to do a permanent arrangement but then the onsite teams said it’s too heavy for them” – Provider C; male, case manager, public hospital “For staff, we will definitely have to reassure staff, we have to check in with them, and see whether, because if they are under split teams, they might be overworked, they might take in a bit more clients than they used to, so we have to check in on them.” – Provider E; female, social worker associate, social service “We cannot do anything, if you really need to push yourself right... it is going to be a problem, it can work for a certain period of time, but I will say definitely is not sustainable... Because it’s at the expense of the individual service provider. As a team, I think we can run. But as an individual, we are slowly exhausted. So then, is another question of I don’t know how long this team can run. – Provider L; female, psychologist, primary care
Innovation in the workplace	“COVID-19 has taught me to be more innovative... how to improve processes... I should do something to work on the processes, so lesser for them on the administrative work.” – Provider G; female, centre manager, social service “COVID-19 has taught caregivers to be more resourceful, you know like I said they were not able to do their usual activities and things like that. A lot of caregivers became more resourceful” – Provider H; female, psychologist, social service
Innovation in the online shift of services	“Online sessions are more convenient in the sense that you can do it at your own place and time, you know like, I guess it’s more convenient for them in that sense... it might be a bit more challenging for counsellors to do online counselling because you, like you can’t really know what they’re thinking and feeling because you’re not seeing them face-to-face and there might be other distractions around as well so it won’t be the same as face-to-face counselling when you’re in a, like you know we’re in a safe space and you know you can talk your feelings out.” – Provider B; female, caseworker, charity “if it’s on Zoom then a lot of restrictions because I cannot see beyond the screen—I cannot see the other body movements because all the postures, all the non-verbal cues are important in my line of work... and also some assessments like IQ you cannot do it online anyway because they have to do some non-verbal tasks.” – Provider P; female, psychologist, private practice “The inability to also connect, so a lot of loneliness experience because of that as well, given that your home is not the safest place... some people in the background now that we’ve had noise outside that’s picked up that they’re just very, very distracting, but there’s nothing that you can do technically” – Provider M; female, clinical psychologist, private practice

Table 3. Illustrative quotes of theme 3: Impact on mental health landscape.

Subtheme	Illustrative quotes
Increased recognition of importance of mental health	“A good thing that came out of this pandemic is that there became more awareness about mental health and the importance of taking care of one’s own mental health...” – Provider H; female, psychologist, social service “the government, the media... actually sort of put emphasis on mental health during this period... Actually they increased the awareness and this actually helped people to seek help... because I was also the National Care Hotline volunteer as well and because of this availability of service right... because of this—increased emphasis on mental health during this period.” – Provider I; male, psychologist, primary care “Because of the COVID situation, I do have to acknowledge that the idea of psychology or profession of mental health really just was brought a bit more to the forefront... So I think the pandemic has definitely showcased that mental health or psychologists... without this kind of support, I think there would have been a lot more individuals who may have spiralled or gone a little bit more out of control, due to the lack of connection, and feeling supported in many ways.” – Provider M; female, psychologist, private practice

brought about by the pandemic. Despite the study respondents coming from a wide range of professions, all have reported some degree of impact on their service provision. This impact was evident in the survey arm in that all the participants (i.e. restructured hospitals, community health partners, SSAs) indicated increased service use, and both providers and clients, in the qualitative interviews, shared on the challenges of service provision during the pandemic.

Local and international studies have shown that more people needed and were seeking more psychological help during the COVID-19 pandemic.^{29,30} Owing to the reprioritisation of treatment services for COVID-19 cases, there was a rechannelling of new tertiary care clients towards primary care. Day activity centres and social support venues were closed, while service provider teams were segregated with reduced clinic sessions. The healthcare sector, especially the mental health and social services, had to find innovative solutions to provide continuity of care.³¹⁻³⁵ In that respect, innovations in technology and clinical processes enabled the use of online mental health service delivery, but some providers shared that these might be neither effective in nor capable of reaching out to everyone. These challenges towards digital adoption that the sector faced were also not unique to the Singapore context. A study in Hong Kong on community centres for older adults found that those centres which adopted online services faced constraints such as limited digital literacy of staff members and low digital accessibility, including lacking devices and poor internet connection, for service users.³⁶

Moreover, the increase in new clients in PCHPs and SSAs in this study corroborated the issues related to the increased workload in relation to the reduction in manpower. Restrictions on home visitations during the pandemic also made matters worse. SSAs also reported an increase in clients requiring further escalation but were unable to offer face-to-face interventions. The pursuit of providing continued care for clients was an uphill task for the mental health and social services sectors during the pandemic. Indeed, the increased barriers to access mental health care will severely affect clients with pre-existing mental illness, which could result in mental relapse or further uncontrollable situations.²⁹

Societal attention on mental health and social services

It is evident that more societal attention has to be given to mental health and social services. The COVID-19 pandemic and its related measures have caused an unprecedented impact on the general health of the population. People were not able to go out of their homes during periods of lockdown, resulting in increased

tensions within unsupportive households and increased rates of domestic violence. Fears of contracting COVID-19 and of its disease progression have produced a general sense of anxiety in the population.

With the world facing the COVID-19 pandemic for the long term and the threat of the disease becoming less acute, attention has to be shifted to mitigate the psychosocial impact of the restrictions surrounding the pandemic. The disruptions to mental health and social service delivery have likely impacted the morale of service providers. Providers may experience compassion fatigue and burnout more often than before.^{37,38} The findings from this study are concerning as respondents reported increased service use but were faced with persistent and unpredictable barriers. Mental healthcare providers and allied health professionals alike have reported worse mental health outcomes during the pandemic in many studies globally,^{35,39} and some have reported resorting to using negative coping strategies such as alcohol and tobacco to cope with the stress of the pandemic.⁴⁰ Although our study did not collect data on the utilisation rates of mental health support by the providers, one study found low rates (between 1% and 22%) of allied health professionals in the United States using any form of mental health support, despite them experiencing stress.³⁹ Far greater emphasis and investment of resources for mental health and social services from the whole-of-society are needed to confront the “mental health tsunami”.⁴¹

With the protracted pandemic and constant threat of new variants, public health measures should shift towards supporting people holistically. Healthcare systems should seek to empower and destigmatise people who seek help. With the increase in awareness of mental health issues, healthcare policies should adopt a proactive approach in mental health care, stepping up in their engagement with schools and outreach to the public. Systems could be in place to monitor and address the distress levels in vulnerable and at-risk populations (e.g. healthcare workers, elderly living alone, marginalised individuals).

As a result of the pandemic, the rapid push of digital solutions in mental health practice (e.g. teleconsultations) has created new opportunities to provide sustainable preventive mental health care and support. With growing adoption of online service delivery in the mental health and social service sectors, medical schools can institutionalise a curriculum on digital mental health by leveraging the experience gained from using telehealth during the pandemic to improve and upskill mental health and social service providers on delivering telehealth care to their clients effectively.

Limitations

The findings of this study should be considered along with its limitations. The data collection was conducted primarily online (i.e. online survey and interviews) to reduce physical contact, which may have excluded some providers and clients who faced barriers in accessing the internet (e.g. low technology literacy). Further, significant effort was needed in collating the administrative data for the survey, and some organisations neither responded to nor provided data for the study. These limitations can thereby reduce the generalisability of the findings. Nonetheless, a wide range of mental health and social service providers participated in this study, and a set of broad (rather than narrow) observations and vast opinions of service providers were captured through the qualitative interviews.

It was noted that only 3 clients participated in the qualitative interviews. Efforts were made to recruit more clients through repeated email outreach to the providers. However, the providers were unable to refer their clients as the sessions were mostly virtual and the providers had expressed that most of their clients were not interested to participate in the interviews. Despite this limitation, the overall mixed method design of the study through integrating the survey with the interviews reinforced the robustness of the study's overall findings. Overall, the study findings indicate a strong and necessary need for more extensive studies on COVID-19 and its impact on the mental health landscape.

CONCLUSION

At the conclusion of this study in April 2021, Singapore was going into its second circuit breaker owing to increasing COVID-19 cases driven by the Delta variant. Dining in was once again ceased, and social gatherings were prohibited. However, the health ministry had acknowledged the importance of making mental health and social service support accessible during times of crises. Mental health and social services were considered essential, and restrictions to providing such services were also lifted. The health ministry had also increased funding to population mental health programmes. This range of initiatives represented a shift in the whole-of-society's mindset in recognising that mental health is an important aspect of coping with the pandemic. It is hoped that the findings from this study contribute to the ever-growing research of the COVID-19 pandemic on the overall public health of the country and the region, and further guide the development of health guidelines for the current COVID-19 pandemic and potentially future outbreaks.

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