A promising future for tele-mental health in Oman: A qualitative exploration of clients and therapists' experiences

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Abstract

Objectives: Tele-mental health services can play an important role in overcoming barriers in mental health services in the Eastern Mediterranean Region. However, despite its potential, tele-mental health has not been widely adopted in Oman. This study is an exploratory investigation into the experiences of therapists and their clients in utilizing video-based telemental health care during the COVID-19 pandemic.

Methods: A total of 19 semistructured qualitative interviews were individually conducted, it included 13 adult clients with mental health conditions who received video-based tele-mental health care and six clinical psychologists who provided video-based tele-mental health care during the COVID-19 pandemic.

Results: The clients reported favorable experiences using tele-mental health, with the primary benefits being convenience, easy accessibility to subspecialized care, reduced absenteeism from work with commuting costs, and alleviated mental health stigma. The therapists also expressed experiencing benefits from tele-mental health, such as reduced risk of intrahospital infection, reduced healthcare costs, and the achievement of work-life balance. Primary concerns were related to the lack of public tele-mental health services, lack of specified tele-mental health guidelines, shortage of trained therapists, limited access to high-speed Internet, electronic devices, privacy, and concerns toward the security of telehealth systems in general. Conclusion: Clients and therapists report that tele-mental health offers new opportunities to improve the quality of mental healthcare services in Oman, and that the challenges could be resolved by establishing governmental tele-mental health services along with developing tele-mental health guidelines and implementing local postgraduate clinical psychology programs in universities in Oman.

Keywords

Tele-mental health, telepsychology, telepsychiatry, telemedicine, COVID-19

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Introduction

The COVID-19 pandemic has posed a major challenge to almost all facets of life, particularly healthcare services, across the globe.¹ These challenges demanded novel healthcare strategies, such as utilizing telepsychiatry and videobased physician-to-patient interaction, to continue to provide quality healthcare while maintaining patient and clinician safety maintain.² These services have been noted to be effective, and studies established that the outcomes are similar when compared to face-to-face interactions. Although healthcare services in almost all specialties are now using telehealth, it is still considered to be a major change in the healthcare system which will require well-established algorithms and strategies for effective application.^{3,4}

The relevance of adopting telehealth amid the COVID-19 pandemic is mainly based on an effort to reduce human-tohuman interaction helping to minimize the number of cases reported. However, there are some points to be taken into

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consideration when applying such strategies from patient and physician perspectives. Lack of access to and familiarity with using videoconferencing technologies might be a challenge to some patients with low socioeconomic status. Furthermore, it can be a demanding situation for the patient to secure a private place to conduct these interviews as it depends on the environment and the housing arrangement.³

A recent review exploring the outcomes and challenges of telepsychiatry faced during the pandemic in the United States summarized the benefits and the drawbacks of this novel strategy. The review emphasized the difficulty in adapting to new technologies and interviewing modalities as one of the major issues faced. Moreover, it highlighted the concerns regarding patient's safety and confidentiality, inability to obtain basic vital signs and perform physical examination in patients with movement disorders and evaluating medications side effects such as extrapyramidal signs.^{5–9}

In addition, a meta-analysis published in Spain aimed to find the efficacy of telephone-based psychiatric consultations, indicating that there are similar outcomes in psychotherapy whether face-to-face or telephone-based.⁷

This is in keeping with the recent emerging evidence from the United States evaluating the efficacy of telepsychiatry on different populations including refugees. Similarly, in Canada, a study published reviewing the outcomes in delivering guided Internet cognitive behavioral therapy in treating mood disorders showed significant results that reflected an improvement in various aspects including remission of symptoms and improving quality of life.^{10–12}

With regards to the Arab world, the implementation of telehealth has led to significant changes in the strategies for providing this service, especially after the COVID-19 pandemic. Several studies concluded that to meet the increasing demand, even postpandemic, telepsychiatry should remain one of the main modalities. There were challenges identified with this, related to the patient, and healthcare system. The patients preferred face-to-face interactions over video-based consultation, namely due to limited resources, knowledge, and concerns about confidentiality.^{12–15}

In Oman, prior to the pandemic, there were limited approaches in terms of implementing and utilizing telehealth due to the risk of litigations from the lack of a regulatory structure.¹⁶ During the pandemic, several studies were conducted by multiple specialties at Sultan Qaboos University (SQU) in Muscat, Oman, to review the effectiveness of initiating such services. At SQU, the Department of Behavioral Sciences has published a randomized clinical trial reviewing the efficacy of online guided psychotherapy in clients with COVID-19-induced anxiety and depression. The results indicated a significant reduction in both depression and anxiety among the group who received therapist-guided online therapy when compared to self-help e-mail delivered therapy.¹⁷

In line with this transformation, the Department of Urology at SQU has also reduced the number of patients

seen in the outpatient clinic by providing telephone consultations and allowing medication refill prescriptions through WhatsApp, a messaging service. Taken together, the evidence support, to some extent, the feasibility of remodeling in healthcare delivery in Oman, especially telepsychiatry. Nevertheless, evaluating these services regularly and examining the client and healthcare provider perceptions are paramount.¹⁸

When it comes to the perceptions of telehealth, a study from Oman focusing on the perceptions of family physicians in implementing telehealth using mobile phone call consultations showed that there were obstacles in terms of maintaining the patient's privacy and an inability to get sufficient technical support during the virtual visits. However, it was found to be more convenient for patients who had chronic diseases in terms of avoiding the risk of infection.¹⁹

A recent study from Saudi Arabia addressing the perception of telehealth during the COVID-19 pandemic showed that the only significant factor was preferring virtual visits in terms of time efficiency, and that the most inconvenient factor was being incapable of providing extensive clinical evaluation.²⁰ In addition, a preprint from the same country, focusing on the perception and satisfaction of telehealth from the patient's perspective, the outcomes were similar to the western world in terms of satisfaction regarding the easy accessibility and reachability to the medical staff, interestingly the levels of satisfaction were found to be higher in highly educated individuals as they were willing to continue this process even post the pandemic phase.²¹

There is a paucity of these types of studies in the region, with most of the publications adopting quantitative designs. The present study was conducted to fill in the gap in the current knowledge regarding the implementation of telemental health. Furthermore, this study was a qualitative examination of the experience and level of satisfaction of both healthcare providers and clients during a 6-week trial of therapist-guided video-based therapy for COVID-19invoked anxiety and depression among individuals in Oman during the pandemic. In addition to addressing the limitations and obstacles in providing such services, this study serves as an initial assessment to encourage the proper implementation of telehealth in Oman.

Methods

Study design

This qualitative study was part of a bigger project exploring the efficacy of therapist-guided online therapy versus selfhelp Internet-based therapy for COVID-19-induced anxiety and depression among individuals living in Oman during the COVID-19 pandemic.¹⁷ Due to the paucity of literature focusing on the use of video conferencing as a tool in mental health in this region, a qualitative explorative research design was adopted and based on semistructured interviews.

Table	١.	Clinical	ps)	/cho	logists'	' c	haracteristics.
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Psychologists	Gender	Years of	Previous	Employment
		experience in the specialty	experience in online services	sector
	Female	17	Yes	Private
2	Female	7	Yes	Private
3	Female	11	Yes	Government
4	Female	10	Yes	Government
5	Female	6	No	Government
6	Female	8	No	Government

Table 2. Clients' characteristics.

Clients	Age rangeª	Gender	Status of education	Status of employment	Area of residence	Taking medication	Any assisted coping skills
1	20–29	Female	College student	Unemployed	Muscat	No	No
2	20–29	Female	College graduate	employed	Muscat	No	No
3	20–29	Female	College student	Unemployed	Muscat	No	Yes
4	30–39	Female	College graduate	Unemployed	Muscat	No	No
5	40-49	Female	College graduate	Employed	Muscat	No	Yes
6	30–39	Female	College graduate	Employed	Al Buraimi	No	No
7	10-19	Female	College student	Unemployed	A'Dakhiliya	No	No
8	20–29	Female	College graduate	Employed	Muscat	No	No
9	10-19	Female	College student	Unemployed	Muscat	No	No
10	20–29	Female	College graduate	Unemployed	A'Dakhiliya	No	No
11	10-19	Female	College student	Unemployed	A'Sharqiyah South	No	No
12	20–29	Female	College student	Unemployed	A'Sharqiyah North	No	No
13	30–29	Female	College graduate	Employed	Al Batinah North	No	No

^aAge range was used to preserve the participants' anonymity.

Study setting

Administratively, Oman is divided into 11 governorates: Muscat (the capital), Ad Dakhiliyah, Ad Dhahirah, Al Batinah North, Al Batinah South, Al Buraymi, Al Wusta, Ash Sharqiyah North, Ash Sharqiyah South, Dhofar, and Musandam. The study was carried out virtually through an Internet-based meeting platform Zoom. This approach was used to comply with the COVID-19 pandemic safety precautions, which discouraged indoor meetings and encouraged physical distancing.

Sampling of informants

The clinical psychologists' participants were selected based on the previous study in the project.¹⁷ They were contacted for this study to explore their perceptions and experiences toward providing online services. The psychologists were emailed with the following information: an electronic consent form, anonymous code to protect their identity during the virtual interview, a scheduled date for the meeting, and a unique Zoom address webpage and password to ensure security (Table 1). The mental health clients who participated in this study were selected based on the previous study in this project.¹⁷ The mental health clients were approached over the phone, explained the purpose of this study and the associated benefits/risks of their participation with confidentiality maintenance assured during the data collection. The agreed participants were emailed with the following information: an electronic consent form, anonymous code to protect their identity during the virtual interview, a scheduled date for the meeting and a unique Zoom address webpage and password to ensure security (Table 2).

Inclusion and exclusion criteria of study participants

All Omanis and non-Omanis living in Oman between the ages of 18 and 65 who have access to the Internet and a video conferencing tool and submitted electronic informed consent were included in the study. Clients having a diagnosis of moderate-to-severe intellectual disability and a history of alcohol or other substance abuse were excluded from the study.

Table 3. Example of	f coding and	thematic develo	pment process
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Original text	Codes	Theme
Even if online therapy is accessible there is a stigma associated with consulting a psychologist or psychiatrist. Virtual clinics provide advantages for those who fear the stigma	 Accessibility to online therapy Stigma attached to in-person consultation Reduction in stigma while receiving virtual mental health care 	Benefits and advantages of virtual mental services

Data collection

In this study, we utilized the purposive sampling technique, and a total of 19 semistructured interviews were conducted between March and April 2021, with six psychologists and 13 clients being interrogated. Twenty-two clients were approached, and 15 agreed to take part in the study (68%). However, data saturation was reached after the 11th interview, at which point the researcher added two more interviews and thanked the rest. In terms of clinical psychologist participation, we invited six therapists, all of whom volunteered to participate in the study (100%); we reached saturation by the fifth interview, and we added another interview to confirm saturation.²² To ensure the absence of potential interviewer bias all the interviews were conducted by one researcher (TA). An interview guide was designed in advance and contained core questions related to mental health video conferencing (Supplementary Material). The interviews were held in the participants' preferred language (English or Arabic). The average duration of each interview was 40 min and, in an attempt to capture the interview data more efficiently, the interviews were audio-recorded.

Saturation was reached in the clients as well as the clinical psychologists' group. Saturation is defined when no new data is needed to be gathered, at this stage we reached saturation and no additional insights were added to the research questions. Therefore, the interviews were stopped.

Data analysis

The audio recordings were transcribed verbatim by one of the authors (TA), with translations performed when needed. The transcriptions were then read through several times by all the researchers to get more familiar with the data. The analysis was performed manually using qualitative thematic analysis at the manifest level. The thematic analysis utilized in this study was inspired by the standard thematic analysis by Braun and Clarke.²³ The three stages of analysis were reading the interview transcripts, then highlighting the related words, then coding them in relation to the text, then classifying them, and finally, identifying the themes with reflective notes.

The data was coded and categorized according to the three emerging themes. All authors independently categorized the data and shared it with the entire team, with the final stage of data analysis being revised by two of the authors (KA and HA). Table 3 shows an example of the coding and thematic development process, and Table 4 shows the final themes with the recognized codes.

Ethical considerations

The study was approved by the Medical Research Ethics Committee at Sultan Qaboos University Hospital (MREC 2380). All of the participants were recruited based on voluntary participation, and the sound files and transcriptions were stored in a password-protected computer with personal identities removed. All of the participants were informed that they had the right to withdraw at any stage of the research project.

Results

The analysis resulted in three main themes: (1) benefits and advantages; (2) challenges and limitations; and (3) recommendations and the way forward.

Benefits and advantages

Clients' experiences

Discussion with the participants revealed that both the clients and therapists were equally satisfied with the virtual mental health services. Moreover, the clients indicated that the virtual consultations were a safe and satisfactory alternative as they helped to minimize disruption to mental healthcare from the physical distancing measures enforced during the COVID-19 pandemic.

"... due to the COVID-19 pandemic it was very difficult for me to meet a psychiatrist or a psychologist with the application of safety precautions, however, I found this virtual mental health service a great alternative" (Female, 40–49 years old)

The clients found that the virtual clinics were convenient to use as they allowed for more flexibility with scheduling and rescheduling appointments, they also facilitated a fast follow-up service. The service allows for potential cost-saving in terms of reduced travel costs, which were associated with good time management and some of the clients reported fewer disruptions to their daily schedules Table 4. Main themes and recognized codes.

Benefits and Clients:						
advantages • Easy adherence to the COVID-19 pandemic safety precautions						
 Easy access, scheduling appointments, rescheduling, and fast follow-up 	 Easy access, scheduling appointments, rescheduling, and fast follow-up 					
 Does not require clients to take time off from their work 						
Eliminates the time and cost of transportation						
 Reduces the stigma of receiving mental health care 						
 Provides care in the patient's own supportive and comfortable environment 						
 Suitable for clients with introverted personalities 						
 Allows clients to choose their preferred therapists virtually, from anywhere in the v 	vorld					
Therapists:	Therapists:					
 Perform risk assessment and decisions for the safest treatment modality 						
 Explores different modalities of mental health services and learn telehealth skills 						
 Opportunity for the therapists to achieve better work-life balance 						
 Brings virtual mental health care to rural areas 						
 Cost-effective therapy from the government's perspective 						
Challenges and Clients:						
limitations • Lack of telehealth services in the government sector						
 Limited access to high-speed internet in some regions 						
 Limited access to electronic devices in some families 						
Technical difficulties						
 Difficulty accessing a private area in the home to conduct the sessions 						
 Fear for the possibility of family discovering that s/he receives virtual mental therapy 	/					
Therapists:						
 Turning the camera off during the session hinders identifying nonverbal cues 						
 Fear of the possibility of the system being hacked 						
 Fear of leaking confidential patient information while conducting sessions from hom 	e					
 Telehealth is not suitable for all mental health conditions 						
 Lack of guidelines for tele-mental health services 						
 Shortage of trained clinical psychologists in Oman 						
Recommendations Clients:						
and way forward • Awareness for mental health generally and, telepsychiatry with telecounseling, speci	fically					
 Adding instant messaging therapy, links to mental health websites and establishing to 	elehealth					
mobile application						
 Providing clients with the choice and the chance for their preferred modality of the 	rapy (virtual vs.					
face to face)						
Therapists:						
 Developing telepsychiatry and telecounseling clinics in the government sector 						
 Developing more specific mental health policies and plans for regulating the use of t 	elepsychiatry					
	cicpsycillati y					

COVID: coronavirus disease.

and reduced absences from college and/or work, as they did not have to take time off from their work to commute to the hospital or clinic.

"... I felt restless and overloaded with duties at work ... it (the virtual service) helped me a lot to manage my time and my overwhelming duties" (Female, 20-29 years old)

"The biggest disadvantage with physical sessions is the waiting time in the clinic, it is very frustrating for me as a student as I have busy study schedule. However, online sessions saved time" (Female, 10–19 years old)

"Everything was convenient, I didn't have to travel to the clinic to receive therapy, it saved me a lot of time and it was very flexible when I needed to re-schedule the sessions due to unexpected commitments" (Female, 30–39 years old)

Although the accessibility to in-person mental health clinics is available in Oman, the associated stigma is a concerning barrier to receiving mental health care. During the COVID-19 pandemic, the virtual mental health services helped in destigmatizing mental health, it opened the door for clients to feel comfortable and reduced their fear toward stigmatizing feelings.

"During the online therapy sessions, I wasn't feeling scared to be a mental health patient and meeting my therapist virtually ... virtual clinics provide an advantage for those who fear the stigma." (Female, 30 years old)

Having completed the virtual mental health services, most of the clients concluded that they have felt encouraged and empowered talking with their therapist from the comfort of their own home. Clients reported feeling more relaxed at their homes and becoming more comfortable with being on a virtual platform, compared to attending to the therapist's clinic, as could overcome intimidating feelings from a stranger sitting across the room from with them. In addition, some of them also expressed gratitude for receiving virtual consultations through a video camera, they found this modality of consultation very suitable for their introverted personality.

"Comparing the face-to-face therapy (received in the past) and the online therapy . . . I am more comfortable with the online sessions. While sitting in my room, wearing my comfy clothes, I felt more comfortable expressing myself . . . I felt that I am more capable to talk when I am in my own space at home . . . I felt more comfortable with online sessions because I am not scared from the actual physical presence of the therapist and meeting with her in the same room." (Female, 20–29 years old)

"Honestly, I am an introvert person and I have minimal social connections, I was hesitant to receive face-to-face consultations in the past because, I have difficulties communicating with the therapist . . . however, I was surprised from the fact that I didn't face any difficulties or barriers while venting out to my therapist virtually." (Female, 30–39 years old)

Discussion with the mental health clients showed that some of them preferred virtual consultations over in-person consultations to meet their mental health care needs. Online consultations, unlike in-person consultations, allow clients to meet with their preferred therapist through virtual communications from anywhere in the world, maximizing the continuity of mental health care, as in-person consultations could be disrupted if either the patient or their therapist are traveling abroad. Moreover, the clients reported a drastic improvement in their symptoms.

"I consider the online therapy a great tool because I can communicate with my favored therapist or any therapist of my choice even if I am not with the therapist in the same country. Now I am in the UK and I can communicate with my therapist in Oman easily . . . I will continue online therapy and I will never consider in-person sessions in the future. I am currently having an online therapy session every week for one hour and it has drastically improved my life." (Female, 10–19 years old)

Therapists' experiences

Mental health therapists reported the ability to perform a comprehensive risk assessment through the established video calls, to protect their clients, identify low-, intermediate- and high-risk clients for hospitalization and to escalate to in-person care based on the different clinical scenarios. Therefore, the risk assessment for maximizing patient safety was well satisfied during the telehealth provision.

"Risk assessments can be done online easily and if a patient is considered a high-risk client and posing a risk to themselves or others, then online therapy is not an appropriate option. However, after providing the session online I could decide what the patient needed, and if they require hospital-based treatment with nursing supervision or just a virtual consultation." (Clinical Psychologist, 8 years in the specialty)

The COVID-19 pandemic has driven an increasing number of therapists to learn different skills and explore diverse modalities of treatments. Accordingly, many therapists in mental health adopted virtual mental health care. The unique opportunity encouraged them to engage with their clients through different telehealth modalities and to develop the relevant telehealth skills and competencies necessary to conduct successful virtual consultations.

"Yes, it (the online consultation) benefited me a lot. It also made me learn how to provide therapy over a distance and it improved my technological skills, such as using email and videoconferencing tools." (Clinical Psychologist, 11 years in the specialty)

The mental health therapists reported that telehealth services enabled them and their clients to have a better worklife balance. For therapists, starting telehealth services helped in easing stress by providing more free time for their personal life without sacrificing the quality care provided to their clients.

"Personally, it (the online consultation) helps me when my kids are at home, I am more available for them and it reduces my stress searching for someone to take care of my children." (Clinical Psychologist, 17 years in the specialty)

Al Masarra Hospital is the only tertiary government hospital for mental health services in Oman, it is located in Muscat, the capital city, and provides specialized care for nearly 5 million people over an area of $>300,000 \,\mathrm{km^2}$, which often leads to a mismatch between needs and resources. Therefore, the majority of the mental health therapists expressed that online consultations are a cost-effective alternative for in-person mental health care, especially for the population that lives in rural areas with limited access to specialized services. Moreover, online consultations improve patient follow-up and continuity of care, as it eliminates transport difficulties.

"I wanted to suggest to the administration at Al Masarra hospital to provide virtual clinics because many clients would travel a very long distance to attend a single appointment . . . this sometimes lead to miss appointments . . . one of my clients is from Salalah, a very far city, the online therapy reduced the distance between the therapist and the client. Therefore, online therapy could serve the underserved and remote areas in Oman." (Clinical Psychologist, 11 years in the specialty)

Challenges and limitations

Clients' experiences

The participants voiced different challenges regarding virtual mental health services compared to the therapists. Analysis of the clients' challenges suggested that the majority of the concerns were related to the IT services, whereas the therapists' concerns were more related to the quality of service provided and the responsibility to preserve patient's dignity.

The interviews with the clients revealed their frustration with the accessibility of the telehealth services. This challenge was associated with the unavailability of the services in the Ministry of Health (MOH). The MOH is the main healthcare provider in Oman and it offers free universal healthcare to all Omani nationals. The clients reported that the telehealth services are only available in the private sector. However, they are discouraged to use this due to its expensive cost.

"I think the problem is in the governmental hospitals because they are not transforming the service into the online modality ... although it would be easier for both the health care professional and the patients ... I think what hampers the spread of telehealth is actually that the service is not available in the government sector, currently, it's only available in the private psychiatric clinics." (Female, 20–29 years old)

"I think students who don't have financial support won't be able to afford online therapy in the private sector, and not all parents can support their children financially to receive online therapy." (Female, 10–19 years old)

Virtual mental health care was proposed as an alternative to improve access to specialized mental health care in rural areas. However, the clients expressed their concerns about the limited access to high-speed Internet, especially in these rural areas. These struggles have prevented the clients from fully leveraging telehealth consultations. Moreover, a few clients reported that access and familiarity with digital technologies is also a barrier to certain tribes, minorities, and Bedouin families in Oman, and some clients felt frustrated after experiencing technical difficulties during the virtual service.

"I believe that individuals who don't have Wi-Fi access at home will face challenges to receive online therapy and using mobile data will be very expensive for them. Also, when I was visiting my village the Wi-Fi was very weak and I couldn't have a sustained 30-minute connection for the session, compared to when I was in Muscat." (Female, 40–49 years old)

"I am from a remote and poor area; the internet services are not available and a large percentage of the population are Bedouins . . . they do not use modern electronic technologies." (Female, 30–39 years old)

Most of the clients revealed that they received the online sessions either in their family homes or in their apartments. They expressed some difficulties in accessing a private setting to receive the virtual consultation. Therefore, they planned their appointments to make sure that they had accessed a private setting, free from distraction and ensuring that the content of the session could not be overheard by family members. However, despite the planning process, the clients reported continued worries regarding the possibility of family members discovering the telehealth sessions.

"I was meeting with the therapist online while I was at home, I avoided talking about certain private matters because I was worried that someone from my family would hear me . . . I scheduled the session at a specific time and made sure that I had a private room . . . but I was still worried . . . my family will not accept the fact that I receive virtual mental health therapy." (Female, 20–29 years old).

"The accessibility to a quiet and a private place to receive on line therapy sessions was a challenge for me... during working days I live in staff accommodation and I share the apartment with my mates and I don't have a private room for myself... on the other hand, when I return home at the weekends, I live with my extended family, we have many kids at home and they disturb me a lot during the virtual sessions." (Female, 30– 39 years old)

Therapists' experiences

It is well known that the approach during mental health consultations requires a high level of cognitive knowledge and skills, not only to understand clients' verbal communication but to interpret their body language as well. Switching on the camera during the telehealth sessions to observe and understand the client's nonverbal communication and body language was one of the challenges the therapists faced. This is because their clients were given the choice to switch the camera on or off, to feel comfortable, and a few clients decided to switch the camera off. Therefore, the therapist was challenged to identify the emotions from words and tone alone.

"I had cooperative clients in terms of communication, but unfortunately, I wasn't satisfied because my clients chose not to show their faces. It was a bit challenging because I wasn't getting enough feedback because I couldn't tell the clients' facial expressions and reactions, when it's in-person sessions we could tell if the client gets agitated, frustrated or emotional or if they are getting comfortable. To be honest, I did not push for turning the camera on, I told them they have the right to choose to turn the camera on or off, so I didn't pressure them and I respected their choice and I didn't explore much as to why they opted to turn off the camera. Otherwise, it's convenient and easily accessible." (Clinical Psychologist, 6 years in the specialty).

"Some clients don't turn the camera on and this prevents me from seeing the non-verbal cues . . . sometimes the clients turn on the camera in the subsequent sessions. Maybe they were hesitant to turn the camera on because they did not experience this kind of consultation before . . . consultation through the internet made it more difficult, even though privacy and confidentiality were reassured." (Clinical Psychologist, 8 years in the specialty).

The majority of therapists reported concerns related to the security of the patient's health information, as this could lead to potential ethical and legal issues. Therapy sessions conducted from the client's home could cause a potential interruption and privacy breach by family members or others. Hackers could also impose an online threat to the security of the telehealth systems. Therapists reported increasing concerns about whether these IT platforms are incorporating an optimal level of security measures, in contrast to a traditional face-to-face encounter which allows more patient privacy and confidentiality. To overcome this challenge, therapists reported giving fully informed consent before embarking on the virtual consultation.

"When it's face-to-face therapy I can assure and promise the client privacy and confidentiality. However, with online therapy, I can't ensure privacy. For example, if the video conference tool was hacked this is beyond my control, so we need to be truthful with the client about these limitations and the client can decide if they wish to continue with online therapy." (Clinical Psychologist, 11 years in the specialty)

"Sometimes I consider in-person sessions conducted in the clinic more confidential than online sessions that are conducted over a video conference tool because I am sure no additional people are present, but this was never an issue for my clients it was more of an issue for me." (Clinical Psychologist, 7 years in the specialty)

All clinical psychologists agreed that an online therapy approach is not a suitable treatment modality for all mental health conditions. For example, clients with severe mental illness are not recommended to receive online consultations. Mental health conditions excluded from the telehealth services were: suicidal or homicidal cases, clients suffering from mania and delirium. Clients with these conditions benefit more from traditional therapy and will often require hospital-based multidisciplinary care. Moreover, the therapists reported that psychometric testing for children and some therapeutic practices were difficult to perform over a virtual platform. An example of such therapeutic practice is eye movement desensitization and reprocessing (EMDR), which is a therapeutic protocol used mainly with trauma clients.

"I was able to conduct counselling over a video conference tool. However, I wasn't able to provide EMDR for trauma clients . . . although the software was available, I preferred to provide the EMDR as an in-person session." (Clinical Psychologist, 7 years in the specialty)

"If the person is delirious or has active serious mania . . . if the person is at risk of harming themselves or someone else . . . it's very important to forward the patient to get the necessary help

in-person and mostly with multidisciplinary psychiatric care." (Clinical Psychologist, 17 years in the specialty)

"It's very difficult to conduct psychometric tests virtually. My clients are usually children suffering from autism and it's very difficult to conduct such tests through the screen." (Clinical Psychologist, 6 years in the specialty)

Globally, telemedicine has been utilized as a way to reduce the COVID-19 infection rates. In Oman, there is a general regulation for the use of telemedicine, issued by the MOH. However, clinical psychologists expressed concerns related to the absence of standards and guidelines designed specifically for the use of telecommunication technologies in the psychology and psychiatry services.

"We don't have policies and regulatory bodies to regulate the mental health online services in Oman and to ensure the rights of both the clients and the therapists." (Clinical Psychologist, 11 years in the specialty)

Clinical psychologists expressed concerns related to the shortage of clinical psychologists in the government sector. In Oman, clinical psychologists are few; however, they play a versatile role in investigating and treating emotional, mental, and behavioral disorders. The therapists revealed that the government sector in the country is eager to utilize qualified therapists with appropriate training and good experience to provide the standard treatment and support for clients with mental illnesses.

"Unfortunately, we don't have a clinical psychology training program in Oman, we have counselling psychology program in two colleges . . . also there is an override of the medical model of therapy in the government sector, the accessibility to a psychiatrist is more compared to a clinical psychologist and this is because the qualified psychologists are mostly in the private sector." (Clinical Psychologist, 6 years in the specialty)

Recommendations and the way forward

The widespread reliance on distance healthcare during the COVID-19 pandemic will likely emphasize its importance and aid in building trust in telehealth as an effective treatment modality. This, in turn, will ultimately lead to a lasting evolution in mental health care practices in Oman. During discussions with the clients and therapists in this study, several themes emerged with regards to recommendations.

First, in Oman, psychological, emotional, and behavioral disorders are likely to be attributed to external forces, such as *jinn* and witchcraft, or as a result of weak religious values and poor faith. Therefore, clients and their families often seek treatment from traditional healers. Psychiatry and psychology services are likely to be perceived as medicine for "crazy people." In our study, all clients expressed positive

opinions toward telecounseling services. However, they recommended greater awareness about the importance of mental health in the community to address the negative stigma surrounding mental health services and treatment. In addition, many clients recommended promoting telepsychiatry and telecounseling as an effective treatment approach to overcome the stigma. In this regard, they mentioned that media could be used to support the dissemination of the effectiveness of telehealth.

"There are individuals in our society who do not believe in the ability of psychiatry and psychology to heal the mental illness because they don't believe in the concept of mental illness in the first place, they explain it as black magic or weak religious bounds with God. Also, there are individuals in our community who are not aware of the presence of online therapy services. We need to advertise for the available online services so that the individuals who are seeking treatment can receive it . . ." (Female, 30–39 years old)

"The Omanis won't feel reluctant visiting the mental health care facilities because it will be no longer viewed as the facilities for the crazy individuals. It is sad how our society views mental health, we should advertise the importance of mental health and how greatly it could impact the individual's life." (Female, 20– 29 years old)

"... individuals might not have actual awareness of the availability of online therapy ... Omanis fear to approach a psychiatric or a psychologist clinic, because the stigma is a concern ... therefore, online therapy could help and social media could play a major role in the implementation of the online therapy." (Female, 20–29 years old)

Few clients suggested attending therapy sessions through real-time instant messaging, as they found themselves having difficulties in opening up and speaking about their mental health in front of others. Other clients recommended text therapy, a follow-up text message with their therapist after receiving the online consultation, as well as adding helpful mental health websites to the virtual sessions. Clinical psychologists are looking to establish telehealth apps designed for clients and healthcare providers to engage in therapy safely and confidentially.

"Online sessions could be followed up by a text to check with the clients how they are doing, if they are facing any challenges carrying out the given tasks. This could help the participant to go through the plan suggested by the therapist." (Female, 40– 49 years old)

"I prefer texting more than talking, I would love if I have received therapy over messaging rather than a video call. I feel more comfortable typing, I find it easier to express myself through messaging compared to when I am asked to speak . . . I wonder if the therapy by messaging will become an option." (Female, 20–29 years old) During the discussion on how to improve the virtual service, the clients suggested having the chance to choose the preferred treatment modality. Providing patient-centered care involves assessing patients' preferences with regards to their preferred treatment modality and matching the treatment with patients' preferences, leading to patient satisfaction, adherence to treatment, and consequently, reduced rate of relapse and treatment cost.

"I wish that online therapy becomes available as a choice, it's very helpful and it will help many patients . . . and those who prefer in-person therapy could continue with in-person sessions." (Female, 20–29 years old)

"... mental health professionals could provide the clients with a possibility to receive the future sessions over the internet if they don't prefer attending clinics." (Female, 20–29 years old)

The clinical psychologists revealed interest and enormous demand to develop virtual mental health care services in the governmental sector. In parallel, they demanded developing standards and guidelines for telepsychiatry and telepsychology to support the effective and safe delivery of virtual mental healthcare. Given the great demand, the need for more clinical psychologists has been voiced by therapists. To become a qualified clinical psychologist, one must at least have a master's degree in clinical psychology. Presently, no public or private university in Oman runs a postgraduate program in clinical psychology. To alleviate the shortage, the therapists recommended the following suggestions: developing a psychological association to incorporate all the psychologists in Oman, implementing postgraduate studies in clinical psychology at universities in Oman.

"There are no widespread regulations related to psychological services. There are no ethical guidelines, there is no association in Oman for clinical psychology and there are no national policies to regulate the therapy." (Clinical Psychologist, 6 years in the specialty)

Discussion

This study reported promising benefits, concerning challenges and encouraging recommendations related to the use of virtual mental healthcare services by clients and therapists. To the best of the authors' knowledge, this is the first study to employ a qualitative design in an attempt to explore the different experiences of clients and therapists toward mental healthcare, using video conferencing tools, in a Middle Eastern country during the COIVD-19 pandemic. During the usage of tele-mental health services in the region, it was shown that this service has been promoted as for the use of mental health care delivery in many countries, even before the pandemic.³ However, the diversity of this region's sociocultural population in comparison to other regions where telehealth has been implemented and assessed has meant that this study provides a wider view. The evaluation of its acceptability, effectiveness including its success and barriers to its widespread implementation as an effective treatment modality is one of the important aims discussed in this article.

This study revealed several benefits experienced by the clients while receiving online consultations. A major benefit was the alleviation of the negative effects of mental health stigma, as the tele-mental health allowed the clients to receive care from their homes and at the time of their preference. The literature supports the tele-mental health service and it has been proved to be effective in overcoming the stigma related to mental health and a significant contributor toward expanding mental health care to clients who fear the stigma.²⁴ In addition, receiving care in the patient's own supportive and familiar environment made clients feel more comfortable during virtual clinics compared to office visits, and this finding is in line with previous research as well.^{25,26} Another previous study supports these findings, indicating that patients' anxiety during their meetings with the mental health specialist was alleviated during video-based consultations compared to their meetings with the therapists in person.²⁷ In this study, introverted clients favored virtual consultations over traditional face-to-face consultations, and reported their desire to continue using virtual counseling in the future. However, clients in a previous study with introverted personalities preferred instant Internet messaging and traditional face-to-face counseling compared to video conferencing.²⁸

Clients repeatedly reported convenience as an important benefit of virtual consultations. Convenience was experienced in terms of easy access, flexible scheduling/rescheduling, lack of commuting resulting in reduced interruptions to patients' daily schedules and eliminating transportation costs. These findings are in line with previous studies in the literature.^{25,26} In addition, the majority of the clients expressed their happiness with teletherapy, because they can receive therapy from anywhere in the world and from their preferred therapists. Interestingly, most of the clients in this study expressed the desire to continue using virtual care even when the current pandemic has resolved. Therefore, some of the clients proposed to tailor the use of virtual mental health care according to their preferences and needs. Another study conducted during the COVID-19 pandemic has shown similar patient attitudes.²⁶

Overall, the majority of the therapists in our study were highly motivated to adopt new digital tools, such as mobile applications, websites, and learn telehealth skills to expand their patients' access to mental health care, consistent with the international trend to promote the use of digital tools to manage the psychological repercussions of the COVID-19 pandemic.²⁹ Another major finding was that the therapists reported no differences in their ability to perform comprehensive risk assessments via the Internet when compared to a traditional face-to-face encounter, an important finding as mentally ill clients could present with a high risk for suicidal or violent behavior while receiving tele-mental health care, implementing suicide risk assessment procedure and safety protocols during telepractice could mitigate this risk.³⁰ On the other hand, despite undertaking suicide risk assessment and following safety protocols, tele-mental health care is not as safe as hospital-based care. Telehealth has enabled therapists to achieve a balance between their professional and personal life, many therapists reported that they are no longer struggling with their childcare, and this finding was consistent with other studies.³¹ Distractions at home, on the other hand, may compromise the therapeutic alliance. The therapists in this study reported that tele-mental health is a costeffective alternative for the delivery of mental health care, particularly for rural populations with limited access to subspecialty care and this is in line with previous findings as well.³²

This study revealed a wide range of challenges reported by clients and therapists. According to this study, clients were mostly concerned about the availability and accessibility of the tele-mental health services. This was considered an important concern for the majority of the clients, and they were vocal about the implementation of digital mental health through the Ministry of Health for all the population in Oman. Also, some clients in the current study reported technological and procedural barriers against telehealth use, with limited access to high-speed Internet being considered as a major obstacle. This finding is similar to another study.³³ Unfortunately, in Oman, broadband Internet development is still in progress in rural areas, and these areas still need telemental health and specialized mental health care. In addition, limited access to proper devices, such as smartphones and computers, was reported as an obstacle for some families. Previous studies documented a lack of electronic resources as a challenge toward telehealth use,²⁶ with digital mental health is less likely to reach marginalized populations with low digital literacy.34

Some clients in this study reported that they are living in overcrowded houses, and do not have access to a safe space to speak with their therapists, similar to another study, where clients reported living in shared homes and feeling frustrated due to difficulty in finding a quiet and private setting.²⁶ Telehealth works better for clients who have access to a private and confidential space.³⁵ The clients in this study raised another concern, which even with access to a private and confidential space they fear that the content of the virtual consultation is discernible to family members. This could be due to the fear of the stigma associated with mental illness and the sensitive nature of the topics discussed with the therapists, which include personal and family issues.

Concerns have been raised by therapists when some of their clients prefer audio calls over video conferencing, these concerns were mainly related to the absence of nonverbal cues and the inability to detect body language. These concerns were previously reported in the literature.³⁶ On the other hand, in-person consultations with face masks also compromise the mental state examination of the patients. Virtual assessments solved this challenge. Therefore, during pandemics, video conferencing should be preferred over telephone services and in-person consultations with face masks.³⁷ Therapists in this study raised their concerns with the privacy and security of the patients' health information, this concern was considered as a barrier in other studies as well.³³ Another concern was the possibility of privacy breach by a third party, overhearing the online session without the patient's knowledge or consent. In some studies, this challenge has been considered as a primary concern for clients receiving virtual care.²⁵

Globally, several countries, including Oman, have released telemedicine guidelines.³⁸ However, in our study, the therapists recommended and demanded developing a tele-mental health guide specifically for psychiatrists and psychologists practicing in Oman. This guide could be supported by mental health awareness at a national level and further supported by establishing mental health websites and a telehealth mobile application. Recently a telepsychology guideline was developed in Saudi Arabia, taking into consideration the cultural, religious, and legal matters that could influence the telepsychology practice. Other Arabic communities could benefit from this guideline as a protocol for virtual mental health services.³⁹

In this study therapists clarified that tele-mental health is not an appropriate model for all mental health conditions, such as active suicidal or homicidal ideas, mania, and delirium. These conditions would potentially require the use of a multidisciplinary hospital-based care team. Therefore, we concluded that tele-mental health is not suitable for all patients, which is in alignment with other studies in the literature that found that clients who were impulsive, emotionally unstable, acutely psychotic, with poor coping skills, or with cognitive impairment are also unsuitable for teletherapy.⁴⁰ We recommend that future research should focus on finding suitable methods to provide tele-mental health for patients with similar mental health conditions and wish to receive virtual mental care. Notably, in this study, therapists reported difficulty performing virtual EMDR for trauma clients and preferred switching to in-person sessions. However, a recent clinical trial has shown the effectiveness of virtual EMDR on healthcare workers facing the traumatic, stressful events due to the COVID-19 pandemic.⁴¹ Another major challenge reported by therapists is the shortage of trained clinical psychologists in Oman, which could be a potential barrier to the implementation of telecounseling that will need to be considered. As such the therapists in this study have suggested developing postgraduate clinical psychology programs in universities in Oman.

Methodological considerations and limitations

The data in this study were collected by the first author, who is an Omani psychiatry resident physician and this gave a positive credit for being part of the mental health care system and having a better understanding of the clients' and therapists' experiences. On the other hand, the outsider aspect of the first author gave another credit for not having any judgmental perspective of the clients and therapists' experiences.

This study had a few limitations, first, all participating therapists were female, this could be explained due to the consistent increase in the health workforce feminization in Oman, increasing female participation in all healthcare professions. Second, the study included only female clients, and the research conducted during the COVID-19 pandemic among the public in Oman has shown that the female gender is an independent risk factor to developing psychological stress.⁴² Moreover, Omani women have a more positive attitude toward mental illness compared to Omani men.⁴³ Therefore, Omani women are more likely to seek mental health services. Notably, gender balance was not the aim of this study.

Conclusion

Generally, clients and therapists had favorable experiences toward tele-mental health, with many suggesting its continued use after the COVID-19 pandemic. Following the recovery from the pandemic, the country should open the door for mental health providers in Oman to adopt technology to deliver and increase access to mental health care. Findings from our study also pointed out specific challenges and concerns that need to be addressed to implement successful telemental health services in Oman. The clients and therapists in this study shed light on well-reasoned and effective recommendations that would potentially aid in delivering successful tele-mental health services.

Declaration of conflicting interests

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Ethical approval

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Informed consent

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Supplemental material

Supplemental material for this article is available online.

References

- Kadir MA. Role of telemedicine in healthcare during COVID-19 pandemic in developing countries. *Telehealth Med Today* 2020; 5: 187.
- Hilty D, Yellowlees PM, Parrish MB, et al. Telepsychiatry: effective, evidence-based, and at a tipping point in health care delivery? *Psychiat Clin North Am* 2015; 38: 559–592.
- Hubley S, Lynch SB, Schneck C, et al. Review of key telepsychiatry outcomes. *World J Psychiat* 2016; 6(2): 269–282.
- Gentry MT, Lapid MI, Clark MM, et al. Evidence for telehealth group-based treatment: a systematic review. *J Telemed Telecare* 2019; 25(6): 327–342, https://pubmed.ncbi.nlm.nih. gov/29788807/
- Gude J, Subhedar RV, Zhang MH, et al. Emerging needs and viability of telepsychiatry during and post COVID-19 era: a literature review. *Cureus* 2021; 13(8): e16974, https://www. cureus.com/articles/64861-emerging-needs-and-viabilityof-telepsychiatry-during-and-post-covid-19-era-a-literaturereview
- Seritan AL, Heiry M, Iosif A-M, et al. Telepsychiatry for patients with movement disorders: a feasibility and patient satisfaction study. *J Clin Mov Disord* 2019; 6: 1, https://pubmed. ncbi.nlm.nih.gov/31183157/
- García-Lizana F and Muñoz-Mayorga I. What about telepsychiatry? A systematic review. *Prim Care Compan J Clin Psychiatry* 2010; 12(2): 00831.
- Hassan A and Sharif K. Efficacy of telepsychiatry in refugee populations: a systematic review of the evidence. *Cureus* 2019; 11: e3894.
- Sucala M, Schnur JB, Constantino MJ, et al. The therapeutic relationship in e-therapy for mental health: a systematic review. *J Med Internet Res* 2012; 14(4): e110.
- Chen JA, Chung WJ, Young SK, et al. COVID-19 and telepsychiatry: early outpatient experiences and implications for the future. *Gen Hosp Psychiatry* 2020; 66: 89–95, https://pubmed. ncbi.nlm.nih.gov/32750604/
- Health Quality Ontario. Internet-delivered cognitive behavioural therapy for major depression and anxiety disorders: a health technology assessment. *Ont Health Technol Assess Ser* 2019; 19(6): 1–199.
- El Hayek S, Nofal M, Abdelrahman D, et al. Telepsychiatry in the Arab world: a viewpoint before and during COVID-19. *Neuropsychiatr Dis Treat* 2020; 16: 2805–2815.
- 13. Okasha A, Karam E and Okasha T. Mental health services in the Arab world. *World Psychiat* 2012; 11: 52–54.
- Aadil M, Cosme RM, Forcen FE, et al. A call for emergency action: telepsychiatry for trauma treatment among Syrian refugees. *Cureus* 2017; 9: e1578.

- Alaboudi A, Atkins A, Sharp B, et al. Barriers and challenges in adopting Saudi telemedicine network: the perceptions of decision makers of healthcare facilities in Saudi Arabia. J Infect Public Health 2016; 9(6): 725–733.
- Altaei MH and Abdul-Mehdi ZT. Telemedicine requirements for treatment network in Oman. J Adv Comput Netw 2013; 1: 246–249.
- Al-Alawi M, McCall RK, Sultan A, et al. Efficacy of a sixweek-long therapist-guided online therapy versus self-help internet-based therapy for COVID-19–induced anxiety and depression: open-label, pragmatic, randomized controlled trial. *JMIR Ment Heal* 2021; 8(2): e26683, https://mental.jmir. org/2021/2/e26683
- Al-Marhoon MS. The impact of covid-19 on urology practice in Oman. *Sultan Qaboos Univ Med J* 2020; 20(4): e404–e405.
- Hasani S, Ghafri TA, Al Lawati H, et al. The use of telephone consultation in primary health care during COVID-19 pandemic, Oman: perceptions from physicians. *J Prim Care Community Health* 2020; 11: 976480.
- Altulaihi BA, Alharbi KG, Alhassan AM, et al. Physician's perception toward using telemedicine during COVID-19 pandemic in King Abdulaziz Medical City, Riyadh, Saudi Arabia. *Cureus* 2021; 13(7): e16107.
- Magdami MM, Kamel FO and Magdami RM. Patients' perceptions and satisfaction regarding teleconsultations during the COVID-19 pandemic in Jeddah, Saudi Arabia, 2020, https:// assets.researchsquare.com/files/rs-51755/v1/2702bc1c-86cf-4d9f-bb23-04216d8841c3.pdf?c=1631853838
- 22. Fusch PI and Ness LR. Are we there yet? Data saturation in qualitative research *Qual Rep* 2015; 20(9): 1408–1416.
- Braun V and Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3(2): 77–101.
- Naik SS, Manjunatha N, Kumar CN, et al. Patient's perspectives of telepsychiatry: the past, present and future. *Indian J Psychol Med* 2020; 42(5 Suppl.): 102S–107S.
- 25. Powell RE, Henstenburg JM, Cooper G, et al. Patient perceptions of telehealth primary care video visits. *Ann Fam Med* 2017; 15(3): 225–229.
- Guinart D, Marcy P, Hauser M, et al. Patient attitudes toward telepsychiatry during the COVID-19 pandemic: a nationwide, multisite survey. *JMIR Ment Heal* 2020; 7(12): e24761, https://pubmed.ncbi.nlm.nih.gov/33302254
- Bleyel C, Hoffmann Ma Wensing M, Hartmann M, et al. Patients' perspective on mental health specialist video consultations in primary care: qualitative preimplementation study of anticipated benefits and barriers. *J Med Internet Res* 2020; 22(4): 1–13.
- Tsan JY and Day SX. Personality and gender as predictors of online counseling use. *J Technol Hum Serv* 2007; 25(3): 39–55.
- Moreno C, Wykes T, Galderisi S, et al. How mental health care should change as a consequence of the COVID-19 pandemic. *Lancet Psychiatry* 2020; 7(9): 813–824.
- Luxton DD, O'Brien K, Pruitt LD, et al. Suicide risk management during clinical telepractice. *Int J Psychiatry Med* 2014; 48(1): 19–31.
- Farzan Bradshaw MR, Carlson MM, Flack JN, et al. Adapting an outpatient psychiatric clinic to telehealth during the COVID-19 pandemic: a practice perspective. J Med Internet

Res 2020; 22(10): e22523, https://www.jmir.org/2020/10/ e22523

- 32. Moirangthem S, Rao S, Kumar CN, et al. Telepsychiatry as an economically better model for reaching the unreached: a retrospective report from South India. *Indian J Psychol Med* 2017; 39(3): 271–275.
- Ortega G, Rodriguez JA, Maurer LR, et al. Telemedicine, COVID-19, and disparities: policy implications. *Health Policy Technol* 2020; 9(3): 368–371.
- 34. Schueller SM, Hunter JF, Figueroa C, et al. Use of digital mental health for marginalized and underserved populations. *Curr Treat Options Psychiatry* 2019; 6(3): 243–255.
- 35. Marhefka S, Lockhart E and Turner DA. Achieve research continuity during social distancing by rapidly implementing individual and group videoconferencing with participants: key considerations, best practices, and protocols. AIDS Behav 2020; 24(7): 1983–1989.
- McLaren P, Ball CJ, Summerfield AB, et al. An evaluation of the use of interactive television in an acute psychiatric service. *J Telemed Telecare* 1995; 1(2): 79–85.
- Thirthalli J, Manjunatha N and Math SB. Unmask the mind! Importance of video consultations in psychiatry during COVID-19 pandemic. *Schizophr Res* 2020; 222: 482–483, https://pubmed.ncbi.nlm.nih.gov/32553433

- Board of Governors in Supersession of the MC and of India. Telemedicine practice guidelines: enabling registered medical practitioners to provide health care using telemedicine, 2020, https://www.mohfw.gov.in/pdf/Telemedicine.pdf
- Alqahtani MMJ, Alkhamees HA, Alkhalaf AM, et al. Toward establishing telepsychology guideline. *Ethics Med Public Health* 2021; 16: 100612, https://www.sciencedirect.com/science/article/pii/S235255252030150X
- Simms DC, Gibson K and O'Donnell S. To use or not to use: clinicians' perceptions of telemental health. *Can Psychol* 2011; 52(1): 41–51.
- Tarquinio C, Brennstuhl M-J, Rydberg JA, et al. EMDR in telemental health counseling for healthcare workers caring for COVID-19 patients: a pilot study. *Issues Ment Health Nurs* 2021; 42(1): 3–14.
- 42. Sinawi H, Al Balushi N, Al-Mahrouqi T, et al. Predictors of psychological distress among the public in Oman amid coronavirus disease 2019 pandemic: a cross-sectional analytical study. *Psychol Health Med* 2021; 26(1): 131–144, https://pubmed.ncbi.nlm.nih.gov/33151748/
- 43. Al-mashrafi S, Al-saadi S, Al-ruzaqi W, et al. Determinants affecting the perception toward mental health problems among residents at Oman Medical Specialty Board; across sectional correlative study. *Clin Exp Psychol* 2020; 6(1): 1–4.