DIGITAL MENTAL HEALTH

Evaluation of telepsychiatry during the COVID-19 pandemic across service users, carers and clinicians: an international mixed-methods study

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ABSTRACT

Background Worldwide uptake of telepsychiatry accelerated during the COVID-19 pandemic.

Objective To conduct an evaluation of the opinions, preferences and attitudes to telepsychiatry from service users, carers and clinicians in order to understand how telepsychiatry can be best used in the peri/post-COVID-19 era.

Methods This mixed-methods, multicentre, international study of telepsychiatry was set in two sites in England and two in Italy. Survey questionnaires and focus group topic guides were co-produced for each participant group (service users, carers and clinicians).

Findings In the UK, 906 service users, 117 carers and 483 clinicians, and in Italy, 164 service users, 56 carers and 72 clinicians completed the surveys. In all, 17 service users/carers and 14 clinicians participated in focus groups. Overall, telepsychiatry was seen as convenient in follow-ups with a specific purpose such as medication reviews; however, it was perceived as less effective for establishing a therapeutic relationship or for assessing acutely disturbed mental states. In contrast to clinicians, most service users and carers indicated that telepsychiatry had not improved during the COVID-19 pandemic. Most service users and carers reported that the choice of appointment modality was most often determined by the service or clinician.

Conclusion and relevance There were circumstances in which telepsychiatry was seen as more suitable than others and clear differences in clinician, carer and service user perspectives on telepsychiatry.

Clinical implications All stakeholders should be actively engaged in determining a hybrid model of care according to clinical features and service user and carer preferences. Clinicians should be engaged in training programmes on telepsychiatry.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Worldwide uptake of telepsychiatry accelerated during the COVID-19 pandemic. Telepsychiatry can be an effective way of delivering mental healthcare.

WHAT THIS STUDY ADDS

⇒ In this co-produced, multicentre, international, mixed-methods study, telepsychiatry was seen as convenient and suitable for routine follow-up appointments such as medication reviews, but less so for new assessments or for those with acutely disturbed mental states such as psychosis or high-risk situations such as assessing those with suicidality. Service users did not think telepsychiatry had improved during the COVID-19 pandemic and thought that the choice of appointment type was determined by the service or clinician rather than in consultation with them.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ All stakeholders should be actively engaged in determining a hybrid model of care according to individual and clinical features. Clinicians may benefit from training programmes on telepsychiatry to improve knowledge and skills in topics such as data confidentiality and digital literacy.

BACKGROUND

Telepsychiatry is defined as 'the delivery of psychiatric assessments or follow-up interviews from a distance using technologies such as telephone calls, audio and video digital platforms, and healthcare monitoring devices'.[1] While patchy adoption of remote consultations occurred prior to the COVID-19 pandemic,[2] widespread adoption happened almost overnight with the onset of global lockdowns.[3]

A systematic review of the worldwide uptake of telepsychiatry demonstrated that the transition in service delivery from face-to-face to telepsychiatry during the COVID-19 pandemic generally reflected the degree of local social distancing restrictions.[4] While some services continued to have a high uptake of telepsychiatry even after the easing of restrictions, this was not universal. Some service

users, such as those on clozapine and those with dementia, poor digital literacy or chronic severe psychotic conditions, tended not to use telepsychiatry.

Numerous studies have separately explored clinicians[5–8] and service users'[9–12] attitudes and preferences for telepsychiatry so are unable to compare viewpoints.[13] These studies have usually relied on either quantitative or qualitative methods. In addition, the studies generally focused on one type of telepsychiatry (such as telephone or video conferencing) within one service or department.[14]

OBJECTIVES

Using a mixed-methods approach,[15] we aimed to evaluate the opinions, attitudes and preferences of service users, carers and clinicians for telepsychiatry, including its perceived usefulness, strengths, challenges, barriers and changes over time. We included participants across two National Health Service (NHS) mental health trusts in the UK and two public mental health departments in Italy to provide a nuanced picture of when, how and for whom telepsychiatry is most and least useful. To our knowledge, this is the first international, multicentre study of attitudes and preferences of telepsychiatry using a mixed-methods approach (focus groups and surveys) across service users, carers and clinicians.

METHODS
Study design

This concurrent mixed-methods study consisted of focus groups and surveys with service users, carers and clinicians at two NHS trusts in the south of England and two mental health departments in the Lombardy region in Italy; it was conducted between March 2021 and May 2022. Mixed methods are defined as the purposeful mixing of qualitative and quantitative data 'for the broad purposes of breadth and depth of understanding and corroboration'.[16] The development of the focus group topic guide, surveys for each participant group (service users, carers and clinicians) and the analysis plan followed an iterative process with each step informing the next to broaden and deepen the scope of our knowledge. A patient and public involvement representative (RE) contributed as a core team member during all phases of the project.

Study setting

At the start of the pandemic in 2020, Italy was severely affected.[17] The first COVID-19 epidemic outside Asia was uncovered in the Lombardy region of Northern Italy.[18] Two mental health departments were chosen for the study due to the elevated impact of the pandemic on their province since the earliest stages of the first wave.[19]

One department (Italian site 1) serves a population of approximately 600.000 people in the southwest of Milan and provides a full range of inpatient hospital interventions and outpatient services in community mental health centres. Italian site 2 provides the same services to a population of approximately 230.000 people in the province of Lodi, an agricultural and industrial centre on the Adda River, southeast of Milan.

The two NHS trusts that participated as UK sites in this study were located in the south of England. UK site 1 provides community-based and mental healthcare for a population in excess of 2 million people, encompassing deprived urban and rural areas allowing a broad view of a wide range of mental health service users. UK site 2 provides specialist mental health services, learning disabilities, social care and integrated community healthcare services to approximately 1.4 million people with a mixture of urban and rural communities.

All included sites offered telepsychiatry to outpatients at different time points during the pandemic. In both UK sites, Microsoft Teams was used for video consultations and there were no problems with connectivity or bandwidth. In the Italian sites, Microsoft Teams and Skype were used and bandwidth problems were quite common. There were no on-sight telehealth coordinators at any site.

Surveys

Initial surveys were developed by clinicians, carers and service users who took part in workshops to develop items exploring preferences and attitudes to telepsychiatry. These informed three distinct surveys (see online supplemental file 1) for service users, carers and clinicians.

Members of the UK and Italian study teams worked iteratively to confirm readability of the Italian version of the surveys and avoid discrepancies across the two languages. Independent forward and back translation were used to ensure consistency between languages.

Surveys were distributed to eligible participants via a combination of email, text message and/or paper copies (Italy only) depending on feasible channels for distribution given local contexts. Where electronic methods were used, surveys were in Microsoft Forms. No personally identifiable information was required. Further details of survey distribution channels and dates of distribution by site are described in online supplemental file 2.

Analysis

Survey data were analysed descriptively, across the major outcomes related to opinions, preferences and attitudes to telepsychiatry, as well as demographics.

FOCUS GROUPS
Access and recruitment

Focus groups were conducted both before and after the surveys (UK in March 2021 and Italy in May 2022; please see online supplemental file 3 for the chronology of surveys and focus groups). The mixed-methods approach meant that qualitative and quantitative data were collected and analysed in sequence each providing deeper insights and context to be explored in more detail at the next stage.

Clinicians, service users and carers from the four sites were recruited using convenience sampling. Participant information leaflets were disseminated through the clinical services at the two UK sites; information was disseminated by word of mouth at the two Italian sites. The study was promoted to clinician participants during research meetings and clinicians were encouraged to share information about the study with service users. A basic level of English was an inclusion criterion for participation. Interested participants contacted the study team in order to participate and were provided with the opportunity to ask any further questions. The dates and times scheduled for the focus groups were at the convenience of participants.

Data collection

Individual written informed consent was obtained and demographic information collected from participants before each focus group. Focus groups were conducted online and recorded using either the Microsoft Teams or Zoom recording functions. Each focus group lasted approximately 60 min and was

moderated and facilitated by at least two researchers (CH, CZ, KE), one of whom (CH) is an experienced qualitative researcher.

A topic guide, which had been developed through discussions with service users, clinicians and carers at previous study consultation meetings (online supplemental file 4), was used to inform and structure the focus group discussions. All focus groups were conducted in English. However, for the Italian focus groups, one of the facilitators (CZ) was bilingual (in Italian and English) in case of any language difficulties requiring interpretation or clarification.

Six focus groups were conducted between March 2021 and May 2022. Of these, four were in the UK, two per NHS trust. Each UK trust held one focus group for service users/carers and one for clinicians. Two focus groups were carried out with participants from both Italian sites, one for service users/carers and one for clinicians. Separate focus groups were undertaken for clinicians and service users/carers to allow participants to speak freely without feeling inhibited.

Analysis

The focus group recordings were transcribed by members of the research team (KE, CA). Participant details were anonymised during the transcription process. Copies of the digital recordings were stored on NHS/university computers in line with local data protection policies. Data were analysed thematically and managed using the framework method.[20] A number of transcripts were double coded by two members within the research team (CH, KE, CA) to ensure consistency. Following this, a working analytical framework was established, and using the constant comparative method,[21] the researchers were able to establish similarities and differences in perspectives. Transcript data were inserted into a framework matrix in Microsoft Excel, to enable data ordering and synthesis,[20] for within and across case analysis of the data. Once the researchers had coded and categorised the data within the framework matrix, the wider team discussed any emerging findings, to aid interpretation, explore and develop themes relating to participants' views and experiences of telepsychiatry. We used the Consolidated criteria for Reporting Qualitative research[22] guidelines to report the qualitative results.

Findings

Demographics of participants

Please see table 1 for demographics of survey respondents and online supplemental file 5 for focus group participants.

Main themes and findings from survey and focus groups

Overall, focus group participants described both positive and negative aspects of telepsychiatry. This was dependent on multiple contextual, environmental and individual factors. The surveys demonstrated an overall preference of all participant types for face-to-face consultations. Data from both focus groups and surveys demonstrated that participants saw the benefit of having the option of telepsychiatry, mainly for factors relating to convenience. The key themes are outlined below, with related quotes to illustrate the themes contained in online supplemental file 6.

Theme 1: preferences, choice and change over time

The majority (78.1–84.7%) of all participant types (service users, carers and clinicians) preferred face-to-face consultations to video or telephone consultations (table 2). While only 20.3% of service users and 20.6% of carers felt that their experience of telepsychiatry consultations had improved over time, more

Table 1	Survey participants' demographics		
Characteristic	Service users, N=1070*	Carers, N=173*	Clinicians, N=555*
Age			
12–15	0 (0.0%)	55 (31.8%)	0 (0.0%)
16–17	32 (3.0%)	26 (15.0%)	0 (0.0%)
18–24	134 (12.5%)	14 (8.1%)	24 (4.3%)
25–34	193 (18.0%)	19 (11.0%)	136 (24.5%)
35–44	209 (19.5%)	6 (3.5%)	140 (25.2%)
45–54	215 (20.1%)	16 (9.2%)	136 (24.5%)
55–64	136 (12.7%)	10 (5.8%)	106 (19.1%)
65–74	76 (7.1%)	11 (6.4%)	5 (0.9%)
≥75	66 (6.2%)	13 (7.5%)	1 (0.2%)
Prefer not to say	9 (0.8%)	3 (1.7%)	7 (1.3%)
Gender			
Female	733 (68.5%)	104 (60.1%)	423 (76.2%)
Male	311 (29.1%)	57 (32.9%)	124 (22.3%)
Non-binary and other	24 (2.2%)	12 (6.9%)	7 (1.3%)
Prefer not to say	2 (0.2%)	0 (0.0%)	1 (0.2%)
Ethnicity (UK)†			
Asian/Asian British—Bangladeshi	4 (0.4%)	0 (0%)	3 (0.6%)
Asian/Asian British—Indian	7 (0.8%)	0 (0%)	8 (1.7%)
Asian/Asian British—Pakistani	7 (0.8%)	2 (1.7%)	4 (0.8%)
Asian/Asian British—other background	3 (0.3%)	1 (0.9%)	1 (0.2%)
Chinese/Chinese British	6 (0.7%)	0 (0%)	2 (0.4%)
Black/Black British—African	3 (0.3%)	1 (0.9%)	24 (5.0%)
Black/Black British—Caribbean	2 (0.2%)	1 (0.9%)	4 (0.8%)
Black—other background	0 (0%)	0 (0%)	2 (0.4%)
White and Asian	11 (1.2%)	4 (3.4%)	2 (0.4%)
White and Black African	6 (0.7%)	0 (0%)	1 (0.2%)
White and Black Caribbean	11 (1.2%)	1 (0.9%)	5 (1.0%)
White—English, Scottish, Welsh, Northern Irish	751 (82.9%)	93 (79.5%)	350 (72.5%)
White—other background	65 (7.2%)	7 (6.0%)	51 (10.6%)
Other mixed background	4 (0.4%)	2 (1.7%)	4 (0.8%)
Other ethnic group	5 (0.6%)	0 (0%)	8 (1.7%)
Prefer not to say	21 (2.3%)	5 (4.3%)	14 (2.9%)
Ethnicity (Italy)‡			
Asian/Asian Italian (Chinese)	7 (4.3%)	4 (7.1%)	0 (0%)
Black/Black Italian (African)	4 (2.4%)	0 (0%)	0 (0%)
Hispanic/Italian Hispanic (Central and South America)	15 (9.1%)	4 (7.1%)	0 (0%)
White—Italian/Eastern European	115 (70.1%)	38 (67.9%)	63 (87.5%)
Mixed Caucasian—Asian (Chinese)	0 (0%)	0 (0%)	0 (0%)

Table 1 Continued

Characteristic	Service users, N=1070*	Carers, N=173*	Clinicians, N=555*
Mixed Caucasian–Black (African)	0 (0%)	0 (0%)	0 (0%)
Mixed Caucasian–Hispanic (Central and South America)	3 (1.8%)	0 (0%)	0 (0%)
Asian—other background	1 (0.6%)	0 (0%)	0 (0%)
Black—other background	0 (0%)	0 (0%)	0 (0%)
White—other background	3 (1.8%)	3 (5.4%)	2 (2.8%)
Other mixed background	1 (0.6%)	0 (0%)	0 (0%)
Other ethnic group	6 (3.7%)	4 (7.1%)	4 (5.6%)
Prefer not to say	9 (5.5%)	3 (5.4%)	3 (4.2%)
Main mental health problem			
Attention deficit hyperactivity disorder	22 (2.1%)	10 (5.8%)	§
Anxiety disorder (eg, panic disorder)	63 (5.9%)	36 (20.8%)	§
Eating disorder (eg, anorexia or bulimia nervosa)	91 (8.5%)	15 (8.7%)	§
Memory problems	63 (5.9%)	12 (6.9%)	§
Mood disorder (eg, depression, bipolar disorder)	282 (26.4%)	36 (20.8%)	§
Obsessive compulsive disorder	10 (0.9%)	8 (4.6%)	§
Other	235 (22.0%)	20 (11.6%)	§
Personality disorder (eg, emotionally unstable personality disorder)	135 (12.6%)	5 (2.9%)	§
Post-traumatic stress disorder	74 (6.9%)	7 (4.0%)	§
Prefer not to say	29 (2.7%)	7 (4.0%)	§
Psychotic disorder (eg, schizophrenia or schizoaffective disorder)	66 (6.2%)	17 (9.8%)	§
Clinician type			
Medical	§	§	77 (13.9%)
Nursing	§	§	177 (31.9%)
Occupational therapy	§	§	21 (3.8%)
Other	§	§	92 (16.6%)
Physiotherapy	§	§	3 (0.5%)
Psychology	§	§	150 (27.0%)
Social work	§	§	35 (6.3%)
How many phone or video consultations have you had since March 2020?			
None	188 (17.6%)	42 (24.3%)	§
1	142 (13.3%)	16 (9.2%)	§
2–5	296 (27.7%)	52 (30.1%)	§
6–10	183 (17.1%)	29 (16.8%)	§
More than 10	261 (24.4%)	34 (19.7%)	§
How much telepsychiatry would you like in the future?			
About half	199 (18.6%)	42 (24.3%)	159 (28.6%)
All, via telephone or video	133 (12.4%)	9 (5.2%)	33 (5.9%)

Continued

Table 1 Continued

Characteristic	Service users, N=1070*	Carers, N=173*	Clinicians, N=555*
Less than half (but more than none)	234 (21.9%)	49 (28.3%)	183 (33.0%)
More than half (but less than all)	117 (10.9%)	19 (11.0%)	125 (22.5%)
Not at all	387 (36.2%)	54 (31.2%)	55 (9.9%)

*n (%).
†For ethnicity (UK), n for service users, carers and clinicians are 906, 117 and 483, respectively.
‡For ethnicity (Italy), n for service users, carers and clinicians are 164, 56 and 72, respectively.
§Survey item not applicable to this participant group.

than half of clinicians reported improvements in their ability to conduct consultations via telephone (55%) and video (70.5%) over the course of COVID-19 (table 2).

Consistent across participant types and between focus group and survey findings, reasons for preferences for face-to-face consultations mainly related to benefits of developing a strong therapeutic relationship and picking up on non-verbal cues in acute clinical situations. For clinicians, being able to view the whole patient was deemed more holistic, less risky and rapport building, especially for service users with whom they had no previous acquaintance. Only a small proportion of clinicians felt that telepsychiatry was a sensitive way to recognise fluctuations in mental state.

Conversely, preferences for telepsychiatry across all three participant types (clinicians, service users and carers) involved factors relating to convenience, including reduced travel time, greater ease of consultation (for mobility issues or self-isolation), reduced infection risk and ease of lip reading (UK only). Some focus group participants also saw telepsychiatry as more suitable for straightforward follow-up meetings such as medication reviews, potentially releasing time for clinicians to see more service users. Consistent with this finding, over 58% of clinicians reported video consultations as effective for follow-up reviews (online supplemental file 7). There was little overall support for telephone consultations.

Certain acute clinical problems were generally viewed as being more suitable for face-to-face appointments due to the importance of non-verbal cues in diagnosis and treatment (described more fully below). Critically, participants of all types strongly believed that service users should be offered a choice about the type of consultation. However, many service users (58.5%) and carers (53.4%) perceived that the choice of appointment had been decided by the clinician/service, rather than through joint decision-making or their decision alone (table 2). In addition, the balance of who should have the final choice in case of a difference in preference was discussed by clinicians in the focus groups. Clinicians felt that where possible, a compromise with the patients and carers should be reached. However, where there was continued disagreement, practicalities and safety issues were seen to be of paramount importance.

Theme 2: individual factors

Focus group and survey responses were consistent in the view that acute agitation, psychotic disorders and suicidality were least suited to telepsychiatry. Anxiety and mood disorders, such as depression or bipolar disorder, were seen by clinicians as most suited to telepsychiatry (figure 1). In agreement, focus

Table 2 Telephone and video consultation responses

	Service users, N=882*	Carers, N=131*	Clinicians, N=555*
Change in use of telephone or video appointments since March 2020			
I (or the person I care for) did not have mental healthcare before March 2020	237 (26.9%)	39 (29.8%)	†
No change	198 (22.4%)	29 (22.1%)	†
Used less often	77 (8.7%)	5 (3.8%)	†
Used more often	370 (42.0%)	58 (44.3%)	†
How was the type of appointment you had most often chosen?			
My choice (and/or my carers)	95 (10.8%)	12 (9.2%)	†
Joint decision (service user/carer and the mental health team)	271 (30.7%)	49 (37.4%)	†
The mental health team's choice	516 (58.5%)	70 (53.4%)	†
Which type of appointment works best for you overall?			
In person with face covering (eg, masks/visors)	423 (48.0%)	62 (47.3%)	179 (32.3%)
In person without face covering	266 (30.2%)	49 (37.4%)	278 (50.1%)
Telephone	79 (9.0%)	8 (6.1%)	28 (5.0%)
Video	114 (12.9%)	12 (9.2%)	70 (12.6%)
Experience with telephone appointments			
Excellent/good	388 (44.0%)	50 (38.2%)	255 (45.9%)
Fair	209 (23.7%)	41 (31.3%)	208 (37.5%)
Poor/very poor	161 (18.3%)	20 (15.3%)	56 (10.1%)
I have not had a telephone appointment for my mental healthcare	124 (14.1%)	20 (15.3%)	36 (6.5%)
Experience with video appointments			
Excellent/good	344 (39.0%)	55 (42.0%)	314 (56.6%)
Fair	145 (16.4%)	40 (30.5%)	131 (23.6%)
Poor/very poor	97 (11.0%)	12 (9.2%)	36 (6.5%)
I have not had a telephone appointment for my mental healthcare	296 (33.6%)	24 (18.3%)	74 (13.3%)
Has your experience of telepsychiatry appointments changed over time?			
Worsened	79 (9.0%)	6 (4.6%)	†
Improved	179 (20.3%)	27 (20.6%)	†
Have not had telepsychiatry more than once	134 (15.2%)	11 (8.4%)	†
Stayed the same	490 (55.6%)	87 (66.4%)	†
Has your ability in using video consultations changed since March 2020?			
Worsened	†	†	5 (0.9%)
Improved	†	†	391 (70.5%)
Have not used telepsychiatry more than once	†	†	75 (13.5%)
Stayed the same	†	†	84 (15.1%)
Has your ability in using telephone consultations changed since March 2020?			
Worsened	†	†	7 (1.3%)
Improved	†	†	305 (55.0%)
Have not used telepsychiatry more than once	†	†	31 (5.6%)
Stayed the same	†	†	212 (38.2%)

*n (%).
†Survey item not applicable to this participant group.

Continued

groups identified clinical features such as psychosis, paranoia, suicidality, dementia and cognitive impairment as unsuitable for telepsychiatry due to concerns about the ability of people with such problems to engage with telepsychiatry and the challenge to clinicians of detecting non-verbal cues. Other individual factors rendering telepsychiatry less suitable included hearing and physical impairments, as well as loneliness, particularly who might also experience social exclusion. In addition, telepsychiatry was seen as potentially disadvantageous to clinicians' mental well-being. Reasons included stress in not seeing the 'whole patient' and the challenges of establishing a therapeutic relationship, assessing risk and physical health.

Theme 3: challenges and facilitators of using digital platforms

Participants spoke of the limitations of video conferencing platforms in terms of potential issues with connectivity and access to technology, especially for those with greater financial difficulties and more severe mental disorder. Lack of privacy (being able to see into the home environment of the other person), negative impact on mental well-being (service users not having the opportunity to leave the house and clinicians not having breaks) and technical problems (data security) were seen as drawbacks of digital platforms. In particular, participants expressed concern about the challenges related to privacy. Indeed, less than 28% of service user respondents felt confident about confidentiality during video or telephone consultations (online supplemental file 8). However, often, family members had to be present due to challenges service users faced accessing and navigating the digital technologies. On the other hand, ease of involvement of family members or carers was seen as an advantage of video conferencing. This finding was reinforced by the survey results, in which over 55% of clinicians felt that it was easy to involve carers or other professionals in video consultations when required (online supplemental files 7 and 9).

Other advantages of telepsychiatry related to efficiency (clinicians potentially seeing more service users, reduced numbers of service users not attending scheduled appointments) and convenience (travel time, parking, etc). Many commented that digital consultations enabled more people to access consultations and that as a result could potentially overcome traditional barriers related to seeking help.

DISCUSSION

In this international study, similarities and differences in perspectives between service users, carers and clinicians were observed. The main advantages of telepsychiatry were convenience and use when a therapeutic relationship had already been established in person. Overall, clinicians viewed telepsychiatry more positively while remaining cautious about its use in acute clinical situations. Service users and carers felt that the choice of modality was made by the mental health team rather than in consultation with them. Furthermore, in contrast to clinicians, most service users and carers reported that telepsychiatry had not improved over time.
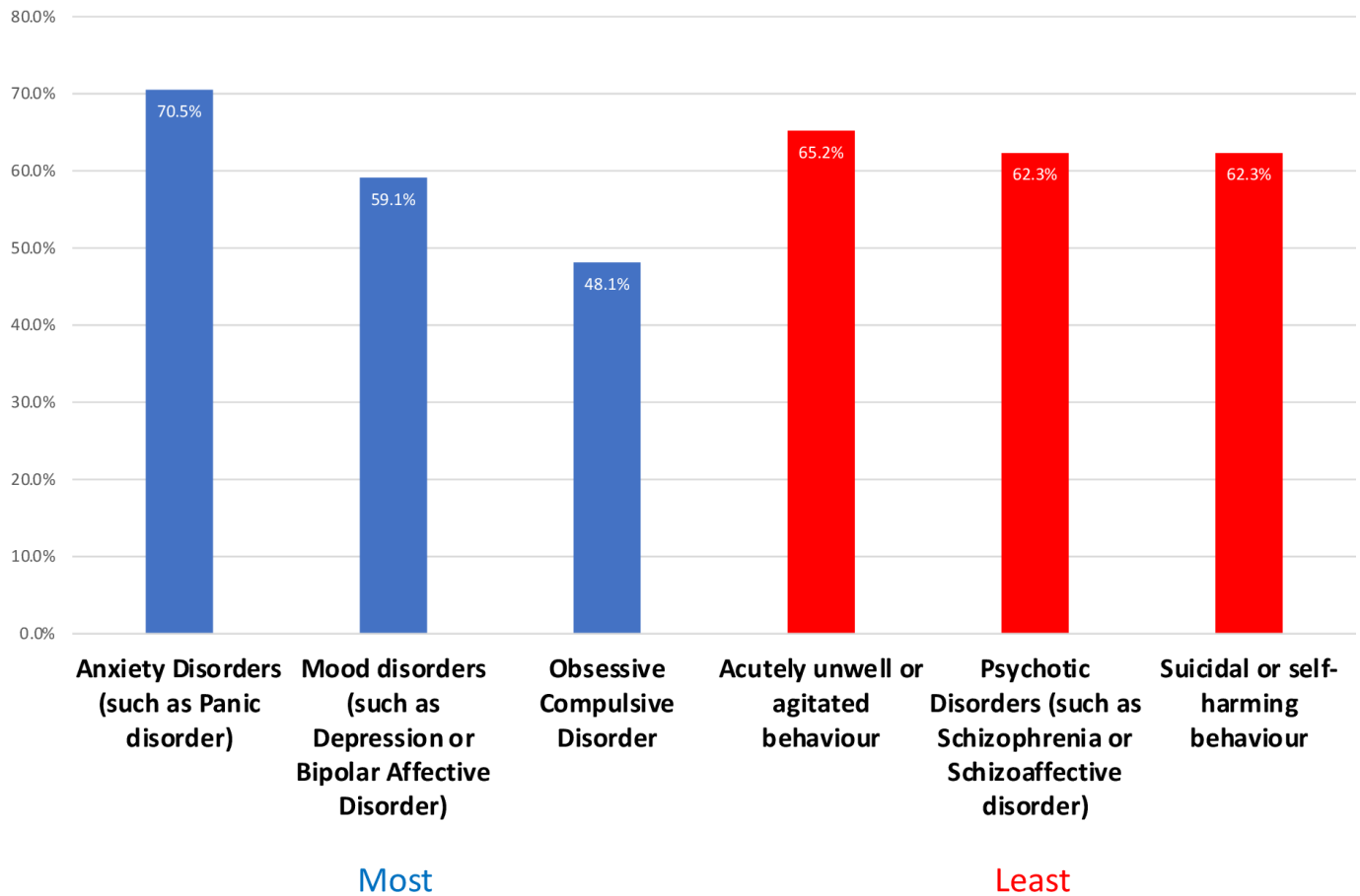
Figure 1 Most and least suitable conditions for telepsychiatry. Top three positive and negative clinician responses.

The finding that interpersonal relationships were more difficult to establish through telepsychiatry was universally endorsed by service users, carers and clinicians. This finding is consistent with previous research.[23] Challenges in developing a therapeutic alliance have been previously described by clinicians[5 8] and service users, describing that a personal connection was more difficult to establish than in face-to-face meetings.[11] However, some commentators have challenged this, especially for younger people, and describe the potential for increased accessibility to promote help-seeking and personalisation of services. The finding that older people may be less likely to engage with telepsychiatry is also consistent with previous research. In this current research study, of note, one main advantage of video consultations was the ease of including others (such as carers). Consistent with previous studies, reducing infection rates in the context of COVID-19 was recognised.[24]

Training in telepsychiatry is a key issue and there are already examples of programmes for teaching telehealth.[25] However, to be effective in improving clinical skills, this will need to be effective, evidence based, engaging and relevant. Critically, there should be measurable changes in competency and ongoing evaluation, including feedback.[26] Telepsychiatry may serve a specific but limited function, such as for follow-up reviews of service users, whereas in-person consultations might be recommended for initial consultations to establish therapeutic relationships.

In particular, situations least suited to telepsychiatry appeared to be for acute mental healthcare, including assessment of psychosis, or the acutely agitated or suicidal patient. Mood disorders were seen by some as well suited and by others as poorly suited to telepsychiatry. This may reflect the clinical spectrum of mood disorders which includes both unipolar depression and bipolar affective disorder, with varying levels of acuity and associated risk.

Consistent with previous studies, clinicians had a more positive view of video consultations than service users or carers. However, also consistent with previous studies, training of clinicians in telepsychiatry was rare. A higher proportion of clinicians (than service users or carers) felt that telepsychiatry had improved over time. This may have been due to the belief that their ability had improved due to repetition and experience. However, all participant types—service users, carers and clinicians—favoured a flexible or blended approach to telepsychiatry, taking into account individual and contextual factors,[4] in particular considerations for digital exclusion for deprived or unwell service users.[27 28]

Strengths

This study represents a multicentre, international mixed-methods exploration of clinician, service user and carer views and preferences for telepsychiatry. It is the first study of which we are aware to include a range of viewpoints (clinicians, service users and carers), across large public mental health services internationally. Co-production of the research and the mixed-methods approach give us both breadth and depth of insight into the opinions, preferences and attitudes toward telepsychiatry. The diverse settings and participant types increase our confidence in the generalisability and robustness of our findings.

Limitations

The surveys and focus groups were conducted digitally; hence, we cannot dismiss the possibility of digital exclusion of potential participants. By proxy, some carers may have helped some service users to participate and may have only partially reduced this effect. Consistent with previous mental health services research, there was a lower representation of ethnic minorities,[28] older adult service users and males. This may have reduced the generalisability of our results including barriers to participation in telepsychiatry; however, there was still a fair proportion (18%) of people who had not participated in telepsychiatry, allowing further illumination of barriers to use. While telepsychiatry may appear to improve the inclusivity of health services, it may not increase accessibility to those most in need due to digital poverty, and caution must be exercised to ensure that the gap in mental health needs is not broadened by promoting its use.[29] In addition, while multicentre and international, the study included only two UK and two Italian sites and may have benefited from broader inclusion.

Focus groups with Italian participants were conducted in English as the interview transcripts were due to be analysed by non-Italian-speaking researchers in the UK and concerns that translation may have led to some loss of meaning. An Italian moderator attended the focus groups to minimise language or communication difficulties. However, a study limitation was that Italian participants were not conversing in their first language which may have limited their ability to express themselves optimally.

Clinical implications

Given the lack of perceived improvement of telepsychiatry over time by service users and carers, repetition and experience alone are unlikely to be sufficient and additional training in telepsychiatry is required in the peri-pandemic and post-pandemic era. In particular, some aspects of telepsychiatry may be conducive to improvement by training, for example, in ensuring and explaining data confidentiality or improving digital literacy. However, other aspects may be more challenging to improve to a standard seen in face-to-face consultations, such as developing a therapeutic relationship or risk assessments in those with suicidality. Most significantly, a hybrid model of care appears to be suitable for many service users. More personalised services could be delivered by considering service user preferences, among several other individual, illness, environmental and contextual factors.[30] The development of a co-designed tool to determine consultation types to be used over the course of an episode of care according to service user preferences and clinical judgement could prove a useful decision-making aid in this area.

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