ORIGINAL CONTRIBUTION



Evaluation of the rapid implementation of telehealth during the COVID-19 pandemic: a qualitative study among adolescents and their parents

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Abstract

The Coronavirus Disease 2019 (COVID-19) pandemic catalysed an abrupt explosion in the use telepsychiatry for the delivery of mental health services. We aimed to explore the experience of telemedicine use during this period among adolescent outpatients and inpatients and their parents. This qualitative study took place in a French adolescent medicine and psychiatry department during the first lockdown. Data collection by purposive sampling continued until we reached theoretical sufficiency. The interviews were analysed by applying Interpretative Phenomenological Analysis which is based on an iterative, inductive process. It included 20 participants: 10 adolescents and 10 parents. The analysis showed three themes: (1) facilitators of a switch from face-to-face to tele-consultation: (a) the context of health emergency, (b) the integration of parents in the treatment, (c) the choice between telephone or video consultation; (2) distance from the therapist's gaze and its consequences: (a) an obstacle to decrypting clinical nonverbal communication, (b) effectiveness depends on the severity of the adolescent's symptoms, (c) and on the previous quality of the therapeutic relationship; (3) awareness of the value of the face-to-face therapeutic space. In the post-COVID era, practitioners would benefit from combining both approaches, face-to-face and remote, based on the quality of the therapeutic alliance, the pathology, the parents' availability for in-person participation, and the patient's age. Future quantitative research will also be necessary to establish the extent to which the experiences described by the participants in this study reflect those of a broader population.

Keywords Telemedicine · Telepsychiatry · Adolescent · COVID-19 · Qualitative methods

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Introduction

The Coronavirus disease 2019 (COVID-19) pandemic is a rapidly evolving public health crisis. Health care practices have changed considerably since 2020 [1]. One of the most significant changes in mental health care has been the rapid shift from in-person, face-to-face services to remote, or "telehealth" services, delivered either via videoconference or telephone [2]. Telehealth is the use of telecommunication technologies, such as telephones, videoconferencing, and the internet to provide health services [3]. Uptake of telemedicine has been one response used by providers to continue caring for patients, while minimizing risk of exposure or transmission of COVID-19 [4]. Thus, early 2020 saw the global pandemic caused by COVID-19 catalyse online delivery of mental health care across Europe [5–7]. The frequency of the onset of mental ill-health in adolescence and early adulthood underlines the importance of early intervention in these patients [8]. In addition, the



COVID-19 pandemic and lockdown have been associated with an increase in mental disorders among adolescents: suicide attempts, depression, anxiety, eating disorders, and cannabis addiction [9–11]. On the other hand, this young population aged 14–25 is "digital native" who should be prime candidate for telehealth solutions [12]. Thus, the COVID-19 pandemic challenged clinicians to determine rapidly how to provide high-quality care while addressing the public health needs of the community [13].

Telemedicine has been increasingly recognized in recent years as a tool for improving access to health care [14, 15]. Before this pandemic, findings from meta-analyses had already indicated that the efficacy and retention of telehealth and face-to-face care for mental health treatment might be equivalent in adults [16, 17] and non-inferiority research has shown video as good as or better than in-person care [18]. More recently, in studies with better methods, clinicians have rated the working alliance lower than in-person care [19, 20]. Despite successful expansion of telemedicine in some areas, barriers to widespread implementation persist, including issues of dehumanizing the therapeutic environment, start-up cost and reimbursement, infrastructure and training, licensure and jurisdiction concerns, both client and clinician suitability factors and ethical guidelines [21]. Nonetheless, the documentation of the use of telehealth in youth mental health service delivery is relatively sparse. Nicholas et al. [22] noted that the most recent review of telehealth in child and adolescent mental health was published in 2004 and that most of the studies considered were descriptive reports or case studies focused on feasibility [23]. The 2016 review by Bashshur et al. [24] also reported fewer studies among children and adolescents than adults. In a literature review, Goldstein et al. [25] describe the special considerations for building rapport and establishing a therapeutic alliance when conducting mental health evaluations for children and adolescents via videoconferencing. The emerging evidence base and clinical experience suggest that teleclinicians can establish a therapeutic alliance during telemental health sessions with youth and families. Further research is needed on the therapeutic alliance and engagement via telemedicine.

Given the paucity and heterogeneity of research on this topic, the rapid and widespread COVID-19-induced implementation of telehealth in European youth mental health services provided a unique opportunity to examine the perspectives of young people and their parents on remote mental health care delivery. Many articles during this period have focused on the experience of health professionals [26, 27] and family caregivers [28], but very few on the cross-sectional perspectives of adolescents and their parents [29]. The perspectives of both groups are critical for assessing multiple aspects of telemedicine services, including therapeutic alliance quality, communication quality, impact on

family routines, and overall satisfaction and acceptability. We, therefore, aimed to examine adolescents' and parents' experiences with telehealth in a French adolescent medicine and psychiatry department during the first COVID-19 pandemic lockdown.

Methods

The Institutional Review Board (IRB00003888, IORG0003254, FWA00005831) of the French Institute of medical research and Health (INSERM) has reviewed and approved the study. Guidelines for ensuring rigor and reflexivity in qualitative research were followed [30, 31], as was the COREQ checklist for reporting qualitative data [32].

Participants

Participants were purposefully recruited in an adolescent medicine and psychiatry department in France (Paris) during the first lockdown, from March 17, 2020, to May 11, 2020. Two researchers (also psychiatrists: EC and MB) sent them a detailed information sheet by email. We included two groups: (1) adolescents (aged 11–20 years), all disorders combined, seen in consultation as an outpatient, inpatient, or at the day hospital, and whose care had to be modified on an emergency basis to remote consultations, by either telephone or video; (2) the parents of adolescents whose care switched from in-person to remote.

Procedure

The adolescents and parents were interviewed separately. A semi-structured guide for each group was developed based on the authors' clinical experience and research expertise in the fields of adolescence, telemedicine, and qualitative methodology. Questions were evaluated by clinical experts, piloted with adolescents and parents, and revised accordingly. The interview guide explored the following topics: (1) changes in the disorders after lockdown began; (2) types of care before and after lockdown began; and (3) advantages and disadvantages of setting up teleconsultation and its perceived differences from in-person consultations. The guide was used flexibly and comprised open questions relating to symptoms and types of care during lockdown, followed by prompts to gather richer data about each experience. Informed oral and written consent was obtained from all participants, and from the parents of young people aged less than 18 years. Two researchers (EC and MB) conducted all the interviews, each about an hour by face-to-face, telephone, or video conference and audio



recorded. Data collection by purposive sampling continued until we reached theoretical sufficiency [33, 34]. MB transcribed the interviews verbatim.

Analysis

The interviews were analysed by applying Interpretative Phenomenological Analysis (IPA), which is based on an iterative, inductive process [31]. The objective of IPA is to discover in a natural setting how subjects experience and give meaning to a phenomenon, by studying what they say about it [35]. The researchers considered their own sources of bias and prior assumptions, including knowledge and experience gained from working in adolescent mental health services (EC, MB, JL, MRM) and conducting research into young people's mental health (EC, JL, MRM). Constant comparative techniques were used to analyse the data, based on Smith's [36] six-stage IPA method. In stage (1), EC and MB became familiar with the data by conducting and transcribing the interviews, and then reading the transcripts. In stage (2), MB conducted line by line coding. Coding was an inductive and recursive process, with constant comparisons made between and within transcripts. In stage (3), codes were combined into emergent themes, which reflected major features and patterns in the data. In stages (4) and (5), themes were reviewed by examining all codes and themes collectively. Tentative themes were reviewed by the research team (EC,MB, JL and MRM) and in a workshop with expert researchers in IPA [37]. Alternative interpretations were considered and discussed until a consensus on the interpretation of patterns in the data was reached. Triangulation made it possible to ensure that the themes identified most accurately reflected the data. Discussing, clarifying, and, if necessary, modifying the themes helped to improve the study's validity [31] and to limit the interpretative biases specific to the IPA [38]. In stage (6), the themes previously selected were finalized, and quotations illustrative of each theme were identified. This last stage then involved producing a coherent and orderly presentation of the themes. That is, we summarized the set of experiences described and moved from a local theory of each interview to a general theory of the research question. NVivo 11 qualitative data analysis software was used to facilitate data coding and analysis.

Results

20 participants met inclusion criteria: 10 adolescents (mean age, 15.8 years; 70% female) and 10 parents (mean age, 42.9 years; 80% female). Only three mothers of interviewed adolescents participated (P1, P5, P6). The adolescents of the other seven parents were not interviewed. See Tables 1, 2. Their experiences were captured in three main themes: (1) facilitators for moving from in-person

Table 1 Characteristics of the adolescent population

Adolescent	Age	Gender	Diagnosis	Type of care	Type of follow-up during the lockdown	Type of interview
A1	17	F	Anorexia nervosa	Full-time hospitalisation (FTH)	In person and visioconference	In person
A2	16.5	F	Depressive syndrome	FTH	In person and visioconference	In person
A3	14	F	Anorexia nervosa	Day hospital (DH)	Videoconference	Telephone
A4	15	F	Anorexia nervosa	DH	Telephone and videoconference	Telephone
A5	18	F	Anxiety disorder associated with anxiety-based school refusal	Outpatient consultation (OC)	Telephone	Videoconference
A6	18	F	Lack of adherence to treatment for preventing rejection of her heart transplant, associated with borderline personality disorder	FTH	Telephone	Telephone
A7	16	M	Depressive syndrome	OC	Telephone	Videoconference
A8	13	M	Anorexia nervosa	OC	Videoconference	Videoconference
A9	14.5	F	Depressive syndrome associated with bulimia and anxiety-based school refusal	OC	Telephone	Telephone
A10	16	M	Depressive syndrome	FTH	In person and visioconference	In person



 Table 2 Characteristics of the population of parents of adolescents receiving therapy

Parents	Age	Relationship	Adolescent's diagnosis	Adolescent's type of care during the lockdown	Type of interview
P1	43	Mother of A8	Anorexia nervosa	OC	Videoconference
P2	40	Mother	Post-traumatic stress	FTH	Videoconference
P3	48	Mother	Anorexia nervosa associated with a depressive syndrome	DH then FTH	Telephone
P4	43	Mother	Depressive disorder associated with anxiety-based school refusal	OC	Videoconference
P5	39	Mother of A2	Depressive disorder	OC then FTH	Telephone
P6	45	Mother of A4	Anorexia nervosa	DH	Videoconference
P7/P8	45 and 47	Mother and father	Anxiety disorder associated with anxiety-based school refusal	FTH	Videoconference
P9/P10	40 and 39	Mother and father	Anorexia nervosa	FTH	Videoconference

to teleconsultations; (2) distance from the therapist's gaze and its consequence; (3) awareness of the value of the inperson therapeutic space.

Theme 1 facilitators for moving from in-person to teleconsultations

This theme covers three types of facilitators mentioned by the participants for changing from face-to-face to teleconsultations.

The health emergency

The participants, both adolescents and parents, reported an initially negative attitude toward teleconsultations.

I was afraid that it would be a little annoying because of the distance and because we only see each other through a screen (A10).

Nonetheless, the use of teleconsultation developed rapidly among patients due to the health emergency and the lockdown. The adolescents' symptoms deteriorated, and the parents felt extremely helpless at home; the need to have conversations with the healthcare professionals became more important than their medium.

It was extremely complicated to be in a permanent state of vigilance, always wondering what could happen, how, when, what would be the next crisis (P7).

This emergency situation finally pushed the participants to accept teleconsultation to maintain continuity in their care.

They couldn't leave us alone in the wild like that. With what we're living through, what we're going through, from a medical point of view, it would be pretty dangerous to not keep seeing us (A3).

Integration of parents in the treatment

Some adolescents reported a reshaping of their parents' place in their care due to the implementation of the remote consultations. Several expressed the feeling that their parents were better involved in this care. They perceived a positive impact that encouraged them to use teleconsultation.

[Teleconsultation] made it possible to have other contacts with my father. It makes it possible to have talks with him, because otherwise it would be kind of complicated for him to come to each session (father living abroad) (A2)

Choice between telephone or video consultations

Each participant appreciated being able to choose the medium for remote care: telephone or videoconferences. All the parents questioned preferred videoconferences for access to an image, especially when they had never met these professionals earlier.

In particular, in these circumstances, seeing the face of the people who are taking care of your child is important, after all (P8).

The adolescents were more divided in their choices. Those who chose videoconferences underlined the importance of being able to have access to the professionals'



gestures and facial expressions, but also being able to be seen and better understood.

I think it's clearer when you can see the expressions on their face. I talk a lot with my hands with gestures too. I think it's clearer when you can see the expressions on their face (A5).

On the contrary, several adolescents stated their discomfort about the use of video during sessions.

There's more contact, finally you see us more and … it's more complicated to hide (A2).

The participants thus raised the question of the relation to the body during the remote meetings they had with the therapist.

Theme 2 distance from the therapist's gaze: consequence

An obstacle to deciphering clinical nonverbal communication

The experience of televisits showed the importance of the nonverbal communication between the adolescent and the therapist. The adolescents reported how much they relied on this nonverbal expression to transmit their emotions during their psychotherapeutic work. They realized during televisits that their therapist could no longer "decipher" them unless they verbalized what they felt.

Being physically there, it would have been simpler to express myself, being face to face, than by telephone. So that [the therapists] can guess things a little, by seeing me, from my expression (A6)

For some adolescents, in particular those with anorexia nervosa, distancing themselves from the therapist's eyes reassures them and helps them to let go as care proceeds.

I feel more sheltered because she [the psychiatrist] doesn't see me and she can't necessarily interpret how I feel when we're talking (A4)

For other adolescents, in particular those with depression and/or anxiety, this distance from the therapist's gaze during sessions destabilizes them by requiring additional effort to make up for the absence of non-verbal communication:

... it's often easier to say something when there's a facial expression that goes with it, it's more understandable, and so in teleconsultation, you have to think more about what you're going to say and say the right words; all that, it's not easy (A5).

Some adolescents thus have the feeling that the therapist can no longer either guess their emotions or decipher their gestures.

When my doctors saw me, they could feel things without me having to talking about them. They could guess a little when things were ok, when they weren't ok. I didn't need to put them into words (A6).

Effectiveness depends on the severity of the adolescent's symptoms

Adolescents and parents both perceived the effectiveness of the adolescent's psychiatric care by teleconsultation to depend on the severity of the symptoms. On one hand, the patients who were stable or in the process of clinical improvement on the whole accepted the teleconsultations very well. They mentioned that their relationship with their therapist was unchanged and that they felt supported in their clinical improvement or during passing moments of emotional instability. They perceived the continuity of care via teleconsultation as therapeutic.

The relationship and the care I have hasn't changed. In any case, the doctors are present the same as always and aren't any different with me (A5).

The parents also perceived teleconsultation as a means of participating in some sessions, despite their work constraints, and thus felt more included in the care. The "routine" sessions for their adolescent who did not present any particular decompensation were particularly interesting for them.

For adolescents with acute or worsening, teleconsultation was perceived as an essential support for continuity of care and as essential aid, given the severity of the situation.

Truly, I've found it a real comfort to be able having this bond; it's extremely reassuring, and especially with a child in a truly fragile condition (P3).

Nonetheless, in situations of major instability, some adolescents found it impossible to use teleconsultations, while several specified that their ability to use teleconsultation depended on the severity of their symptoms. A8 reported both:

At the very beginning when I felt really bad, it was impossible to do it by video…I think that there are people for whom it is not possible. There are people at different stages of their disease different, and depending on that, I think for some it's impossible (A8).



Effectiveness depends on the previous quality of the therapeutic relationship

The participants linked the effectiveness and continuation of teleconsultation to their alliance with the therapist. When it was established before teleconsultation began, the transition to remote sessions was better accepted by adolescents and parents. They then perceived the continuing care to be as effective as in-person sessions.

We were used to it, we know each other well, we trust each other... Starting from a relationship that already exists, it's easier to switch to talking on the telephone or by videoconferences. It's doable when there's already a solid relationship (P4).

Inversely, some adolescents quit their treatment by teleconsultation. This was especially true for those who had only recently begun therapy. Their fragile pre-existing bond with their therapist at the start of teleconsultations did not allow a satisfactory continuation of their care.

Especially if I have to see for example someone who I've never seen before, I'm not going to be really at ease in front of the screen (A8).

The adolescents and their parents both perceived the quality of the therapeutic alliance as a decisive factor in the success of teleconsultations.

Theme 3 awareness of the value of the in-person therapeutic space

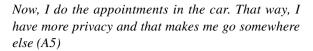
In switching suddenly from in-person to remote consultations, the adolescents, like their parents, became aware of some aspects of the therapeutic space, in particular, its neutrality and its confidentiality.

The need for a neutral therapeutic space outside the home

In having to find a physical space for their teleconsultations, the participants became aware of some aspects of the therapeutic space that they had previously considered earlier about the framework of their care. Many missed the reassuring, neutral setting of the therapist's office, the ritual of going there, "escaping" from home for several hours.

[My appointment] gets me out, and then for two hours, I escape from home and that's good for me (A7)

To adapt and create a neutral space for the consultation, the youth found creative strategies for their remote sessions. For example, one patient chose to have her video visits in a car:



Parents agree with these perceptions and report their sense that the setting of a teleconsultation at home limits their teen's trust and privacy.

Having her psychiatrist, or any other therapist, come by Skype, into her private space, it's complicated for my daughter (P4).

The need for a therapeutic space that is confidential

The participants were able to express their sense of a lack of privacy and confidentiality compared with the therapist's office, which they associated with neutrality, a space devoted exclusively to them and to care.

I won't be in neutral territory, that's for sure. Because my parents are right there, well, my mother is. I would feel more free to talk outside of my house (A2).

The setting of the place where the teleconsultations takes place can no longer guarantee the confidentiality of the conversations. This was the case, for example, for participants living in small spaces, with large families.

I'm always afraid that someone nearby will hear me, because we're in a house, and everyone hears everything (A1).

Perspectives envisioned for the future with willingness for a flexible return to in-person visits

The COVID-19 health emergency required the compulsory and hasty use of teleconsultations, without sufficient preparation. Several factors were perceived as obstacles to the effectiveness of this care, including but not limited to problems of confidentiality, severity of the adolescent's disease, and an inadequate therapeutic alliance. Despite the essential nature of continuity of care, it appeared that all participants, adolescents and parents, wanted to return to in-person care.

···anyway, there's the real aspect, which is nice. When I say nice, it's that it's more agreeable to see the person in front of you and to talk to him, rather than be behind a screen (A10).

On the basis of this unprecedented experience, participants proposed that teleconsultation be used occasionally, depending on the situation. For example, some parents suggest that it might be a supplementary way of including them more in routine care despite their work constraints or traveling.



For very practical organizational reasons, I think that we could keep a mix of the two, between in-person contact and teleconsultation (P3).

Finally, teleconsultation is also an interesting means of care for adolescents unable to come to the therapist's office, precisely because of the disorder. Depending on the adolescent's disorder or clinical stage, teleconsultation could be a supplementary means of continuing care. One mother pointed out:

Inability to face the outside world, I would say, is a part of her disease, in fact, she misses an enormous number of appointment that she couldn't go to because she couldn't move, couldn't get out of bed (P4).

Discussion

The objective was to explore the experience of teleconsultation for adolescents and their parents when the adolescents were receiving care in a department of adolescent medicine and psychiatry during the first French lockdown of the COVID-19 pandemic. Our results identified factors that facilitated the participants' acceptance of these remote therapeutic sessions:

- (a) First was the exceptional emergency context that made teleconsultation a necessary alternative, even the only solution to counteract the ensuing isolation
- (b) The use of teleconsultations seemed to help integrate parents more closely into their adolescents' care and improve the parent-child relationship
- (c) An already established therapeutic alliance before progressing to care to teleconsultations helped facilitate a higher quality and better effectiveness in these remote conversations between patients and clinicians
- (d) The participants with diseases having a physical expression (somatoform disorders, eating disorders) reported that they were more at ease in remote sessions than in person, and still more at ease by telephone than by videoconferences

During the lockdowns and exceptional emergency context due to the pandemic, the population faced isolation and a sudden limitation of access to health care facilities. The literature suggests that the use of telehealth then soared to levels never before seen and was an alternative to isolation [39].

For some parents, who were not living in the same city or even the same country as their child, teleconsultation enabled them to participate without difficulty—sometimes for the first time—in these medical appointments.

The adolescents reported a feeling of satisfaction with this change and had the impression that they were better able to communicate about their health with their parents and thus to feel better understood and supported. The qualitative study by Sà et al. [28] also showed that parents felt better included in their child's treatment by teleconsultation than in person. Nonetheless, our results add the adolescents' perspective and indicate that they appreciated their parents' greater involvement in their care. For this reason, parents, like their adolescents, accepted all the more readily the transition from in-person care to telemedicine.

In relation to therapeutic alliance, the adolescents who met their therapist first by teleconsultation dropped out of care rapidly. Parents also shared the feeling that the transition to remote care was easier when the therapeutic relationship had already been developed. An English study during this pandemic found the same in an adult population. The authors reported that teleconsultation in psychology worked effectively when a therapeutic alliance was already solidly in place [40]. This hypothesis had received support in the literature even before this pandemic, as in the qualitative study conducted by Boydell et al. of telepsychiatry among youth [41]. They pointed out the importance for the maintenance of effective teleconsultations of having already built an alliance between the adolescent and his or her therapist and of having had at least one face-to-face meeting. Nonetheless, this point is controverted by some of the pro-telemedicine literature. Twenty-four studies that examined therapeutic alliance in the context of videotherapy over the past 23 years were evaluated in a narrative review by Simpson and Reid [42]. There was some evidence that therapists find it easier to communicate with children and teenagers by videoconferencing due to their familiarity with technology for gaming and communication [43]. Similarly, a recent study found no significant differences in the quality of empathy and therapeutic alliances across three modalities: in-person, telephone, and videoconferencing [44].

Regardless of the quality of the early therapeutic alliance, some diseases seem less appropriate for this type of care. Recent studies have thus shown that patients with psychotic disorders, eating disorders, severe personality disorders, or acute psychiatric decompensation respond less well to telecare [22, 45]. The study's participants with eating disorders reported the opposite: they reported greater comfort and perceived efficiency of remote therapeutic services. Since the start of the COVID-19 pandemic, a number of studies have explored the initial effects of widespread moves to telehealth for patients with eating disorders and have shown mixed results [46–50]. Treatment modalities on line can lead to greater disinhibition and openness among avoidant personalities [51, 52] because of their greater sense of safety. For these patients, teleconsultation keeps the therapist's gaze distant from their physical expressions. Nonetheless, this sort of



barrier to nonverbal communication demands greater verbal development than would be needed in person. In a recent study [53], almost all therapists indicated they experienced several challenges in remote psychotherapy including the difficulty of reading body language of their clients. We think that this lack of access to nonverbal communication is much more limiting in the treatment of adolescents than of adults. Moreover, a study during the COVID-19 pandemic showed that remote psychotherapy was more difficult than in-person treatment for both children and adolescents, compared with adults [54]. However, most of these studies have been retrospective, cross-sectional, and have used small sample sizes. In addition, the context of the pandemic introduces several confounding variables that may influence both the delivery of treatment and patient's symptoms. For this reason, it is essential that findings drawn from data collected during the pandemic be replicated outside of this context [55].

Many clinicians stressed that the act of coming to inperson appointments was therapeutic in itself even if clients would be more comfortable with telehealth, while for others telehealth could be used as a graded exposure to eventual in-person care. This is also what we observed among the participants who underlined the advantages of leaving their habitual environment to go to their appointment and of having a space for care that is separate from their own daily private place. When on-line treatment is chosen by the adolescent and parents, it seems essential to adapt the treatment framework to recreate a specific therapeutic space and limit the problems of confidentiality. Privacy was the only criterion for which we found divergence between parents and adolescents. Adolescents considered telehealth inferior to in-person care for privacy. This finding suggests that adolescents' perceptions of visit privacy may be more complex than the simple ability to identify a private space for the visit [29]. Prior research efforts with Adolescent Medicine providers have identified several strategies for optimizing privacy and confidentiality during telehealth visits. For at-home visits in which patients have access to adequate technology and space for the visit, these include the use of headphones, yes/no history-taking questions, use of chat functions, and using background white noise to lessen the chance that others in the household will overhear [56].

Implications

In the post-COVID era, it thus seems important to adapt these two methods and mix the approaches—face-to-face and remote—as a function of the quality of the therapeutic alliance, the disorder, the severity of its symptoms, and the patient's age. Three key issues appear to be important and need some precautions.

- Adolescents appreciate their parents' greater involvement in their care through teleconsultation. In family situations where there is a rupture or geographical distance, it may be useful to organise remote sessions in order to improve parent-teen communication.
- Both adolescents and parents find easier to maintain remote care when a therapeutic alliance has been built up previously. We suggest that therapists conduct at least the first meeting with the adolescent in person. This will strengthen the engagement and limit negotiations and disruptions in the therapy.
- Some diseases seem less appropriate for remote care: eating disorders, avoidant personalities disorders or acute psychiatric decompensation. However, the study's participants with eating disorders reported created greater comfort while the literature suggests reduced efficacy of remote therapeutic services for this disease. This may be more efficient due to less attention to physical attributes. We suggest that a multidisciplinary treatment which mixes both approaches would be relevant for some cases of eating disorders: remote psychotherapy sessions combined with a face-to-face medical examination by the paediatrician. This would satisfy the adolescent's preferences, without disregarding the necessary physical examination in this complex disease. However, this issue would require further research. It is essential that findings drawn from data collected during the pandemic be replicated outside of this context [55]. We have to date not specifically determined for whom a remote delivery method might be more or less effective than face-to-face care.

Limitations

An important aspect of this study is its crossing the perspectives of adolescents and of their parents. One of its strong points is the diversified recruitment from the different units of care (full-time hospitalization, day hospitalization, and outpatient consultations) and different types of diseases (depression, anorexia nervosa, anxiety disorders, etc.). This ensures some clinical diversity. Nonetheless, we must note that all of our participants belonged to a middle- to higher socioeconomic class with easy access to internet and other digital tools. Patients who might have interrupted their care due to a lack of access to digital tools were, therefore, not included, which is a limitation of this study. While one of the objectives of qualitative studies is to understand the experiences of a specific subgroup, it is nonetheless useful to conduct other studies with different samples.



Conclusion

Widespread telehealth adoption in response to the COVID-19 pandemic changed health care delivery during 2020 and 2021. Our study highlighted the rapid adaption of both adolescents and their parents to telemedicine and their satisfaction with it during the lockdowns. High acceptability of telehealth suggests that the integration of telehealth as an additional care delivery mode may be highly beneficial in non-crisis times as well [29]. In addition, given the increasing rates of adolescent mental health diagnoses, suicidal ideation, and suicide attempts during the pandemic, telemedicine will be an essential means of delivering evidence-based mental health care to youth, given the dearth of available in-person services. Understanding and addressing emerging health disparities and evaluating telehealth acceptability among marginalized groups will be crucial in its future implementation. Future quantitative research will also be necessary to establish the extent to which the experiences described by the participants in this study reflect those of a broader population.

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Data vailability statement Data avalaible on request.

Declarations

Conflict of interest The authors declared no conflicts of interest.

Ethical approval This research has been approved by the appropriate ethics committees.

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