ORIGINAL RESEARCH

Virtual Consultations: Young People and Their Parents' Experience

Stephanie Proulx-Cabana (1)
Terry Yvonne Segal
Anna Gregorowski
Dougal Hargreaves
Halina Flannery

Paediatric and Adolescent Division, University College London Hospitals NHS Foundation Trust, London, UK **Purpose:** Evaluate the experience of virtual consultations for young people and their families and assess whether young people are being offered a confidential space as part of these virtual encounters.

Patients and Methods: An anonymous online survey was sent to young people age 10–18 y.o. who had experienced at least one virtual consultation with an adolescent medicine tertiary service in the United Kingdom between March 13th and June 13th 2020 mostly associated with, but not exclusively, management of chronic fatigue syndrome or medically unexplained symptoms. Responses from the survey were analysed by two authors who independently coded the common themes reported by the participants.

Results: Fifty young people and their families participated in the survey. Eighty-eight percent reported feeling prepared for virtual appointments, 90% found them helpful, 88% felt that they were private and 86% reported they would find further virtual appointments helpful. Positive impacts reported were no need to travel (38%) and the continuity of care (36%). Many of our participants reported no negative impact (39%) and felt that nothing needed to be improved (56%). The most frequent improvement reported was the provision of a quality video call (34%). Only 36% of young people had the opportunity to speak in confidence to the health care provider without their parents' presence.

Conclusion: Virtual appointments are perceived as safe and helpful by the young people and their families. Professionals should offer a confidential remote space for young people to speak without their parents.

Keywords: COVID-19, SARS-CoV-2, young people, remote consultation, telemedicine, telehealth

Introduction

The COVID-19 pandemic forced the disruption of many clinical services, such as face-to-face modes of patient care. This became significantly more difficult due to government guidelines regarding privacy protection for vulnerable groups. Health services rapidly adopted alternative modes of patient care, but there is a lack of data available regarding the efficacy and unintended consequences of such newly adopted methods.

The technology to enable virtual consultations has existed for some time, yet uptake has been limited. Systematic reviews and meta-analyses of psychological therapies delivered virtually have shown promising outcomes^{1,2} and have shown advantages in terms of accessibility, flexibility and cost-savings and high degree of acceptability to patients.³

The DAWN⁴ and VOCAL⁵ studies have evaluated the use of virtual online consultation and have found virtual appointments to have similar outcomes to face-

Correspondence: Stephanie Proulx-Cabana Paediatric and Adolescent Division, University College London Hospitals NHS Foundation Trust, 235 Euston Road, Bloomsbury, London, NWI 2BU, UK Tel +4420 3447 5240 Email stephanie.proulx-cabana@nhs.net to-face appointments, reduce the number of appointments not attended and be highly effective for some, but not all and recommended that patients be given a choice of the modality of appointments. However, very little research has been conducted on the effectiveness and experience of virtual consultations for young people. 4,6–8

Barriers to wider uptake have included clinician reservations, such as changes in the therapeutic relationship, reduced non-verbal interaction, maintaining confidentiality, responding appropriately to risk situations, and complying with the appropriate best practice. Additionally, local governance and practical issues, such as the availability of appropriate technology, and concerns over accessibility for patients, highlight some of the key organizational, technological and social factors impacting on the adoption of virtual platforms discussed in a recent review by Bokolo. 10,11

Furthermore, confidential care has long been recognised as the standard of care for adolescents as this allows for assessment of the sensitive issues that would not be appropriate to discuss in front of parents. 12 However, providing the same confidential safe space that would be offered in a face-to-face appointment, in a virtual environment could be difficult due: to limitations related to physical environment at home, technology literacy and access, as well as the attention of the health care provider to propose and ensure a meeting with the adolescent alone as part of the consultation. 13 National healthcare guidance during the pandemic encouraged increased flexibility and sensible decision-making with regards to information governance, enabling previous barriers to be overcome and allowing continued patient care. 14 In order to provide continuity of care for the patient group, our adolescent service made a decision to offer telephone and video consultations in place of face-to-face appointments. However, aware of the potential pitfalls of virtual consultations especially in the context of their necessary abrupt introduction, 15 our service wanted to assess if our provision of virtual care was perceived as acceptable by young people and their family. The aim of this survey was to evaluate the general experience to guide our teams in ways to improve these appointments, as well as assessing if confidential care was adequately offered and delivered by our team.

Methods

Our tertiary adolescent service provides care to young people of the United Kingdom age 10 to 19 years-old for a wide range of complex medical conditions with the main focus on the management of chronic fatigue syndrome (CFS/ME) and medically unexplained symptoms. The service offers multidisciplinary outpatient, day care and inpatient models of rehabilitation.

A ten-question anonymous online survey was developed by the co-authors of this article using the SurveyMonkey platform to assess young people and their family's experience of virtual appointments with a particular focus on offering confidential space to young people during the virtual appointment. Survey questions were circulated to all members of the multidisciplinary team to be evaluated and modified accordingly to the final version that was sent to young people. The details of the survey questions are provided in Table 1.

The survey was registered as service evaluation in our establishment as the main goal was to evaluate the team's delivery of virtual care in the context of abrupt transition to virtual appointments when people rarely provided this kind of appointment. There was a time pressure as our team was concerned to know whether the care we were now providing was felt to be helpful, unhelpful or even deleterious to the young people or their families. As the survey was kept completely confidential in the sense that no demographic information that could identify the participants in any way was collected, approval of the ethical committee was not deemed necessary.

A three months period for this survey was decided to provide rapid feedback to the clinical team, starting March 13th 2020, when inpatient elective admissions and face-to-face outpatient appointments were suspended. All potential participants were identified by reviewing all clinical encounters encoded under our team's clinic codes within this timeframe. An email invitation to participate in the survey was sent to young people for whom we had an email address who had at least one virtual consultation. The email drafted to be sent to all young people for the survey explained the aim of the survey, that all recorded information as part of the survey did not include any demographic information that would allow anyone to identify them, that participation was voluntary and would not impact on their future medical care, as participation to the survey would not include their name. We also provided them with an email address in order to contact a member of the survey team if they had any further questions or concerns that they wanted to discuss in further detail. It also explained that the information collected would be shared with our team and could be used for further

Table I Survey Questions

Questions	Type of Questions	Possible Answers
Q1 – How many virtual appointments have you experienced since March 13th 2020?	Multiple choice question	 1 2-3 4-5 6-7 >7
Q2 – What method(s) were used for the virtual appointment(s)?	Multiple answer question	Telephone Video Other (please comment)
Q3 – What professional(s) have you spoken to?	Multiple answer question	Doctor/consultant/nurse consultant Clinical nurse specialist Physiotherapist Occupational therapist Clinical psychologist Social worker Activity coordinator Other (please comment)
Q4 – What was/were the reason(s) for the virtual appointment(s)?	Multiple answer question	Chronic fatigue syndrome Medically unexplained symptoms Emotional wellbeing Medical issues Social support Other (please comment)
Q5 – Who did the professional speak to for at least part of this/these virtual appointments?	Multiple answer question	Young person alone Parents alone Parents and young person together Other (please comment)
Q6 — a) How much, using a Likert scale from I–5, do you agree with the following statements: I felt prepared for this/these appointment(s) I found this/these appointment(s) helpful This/these virtual appointment(s) felt private/confidential I would find further virtual appointments helpful b) Do you have any other comment regarding these statements?	Likert rating scale question	Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree
Q7 – a) Describe what positive impact(s) the virtual method used had on the consultation: b) Describe what negative impact(s) the virtual method used had on the consultation:	Short answer question	
Q8 – What did you appreciate the most about your virtual appointment(s)?	Short answer question	
Q9 – What would you like to see improved for future virtual appointment(s)?	Short answer question	
Q10 – Who contributed to completing this survey?	Multiple answer question	Young personFatherMotherOther (please comment)

dissemination including publication as an article. Based on this relayed information, we did not ask for written consent from our participants but considered that we provided them with all necessary elements for their participation in the survey to be conducted with informed consent. One hundred and fifty-seven young people were identified and invited to participate, of whom 17% were inpatients and 83% outpatients. Each patient received two reminders before the end of the survey period.

The data were manually coded and analysed by two authors using an Excel Spreadsheet. Proportions were manually calculated. Emergent themes were independently blindly coded by the two authors based on qualitative answers collected. Agreement was reached in all cases.

Results

Fifty responses were collected (response rate 32%). The survey was completed by the mother of the young person (48%), followed by the young person (28%) and both (16%). Participants reported having 2 to 3 (48%) or 1 (32%) virtual appointments at the time of the survey. Six percent of our sample experienced more than 7 appointments. Telephone appointments were the most frequent method (82%). Twenty-eight percent of participants experienced both video and telephone modalities. Professionals reported as most frequently involved in virtual appointments were Doctor and Consultant Nurse (76%), Occupational Therapist and Physiotherapist (42%) and Clinical Psychologist (16%). Participants reported the reason for their virtual appointment was CFS/ME (86% of

participants), followed by medical issues or emotional well-being both at 26%.

Young People and Parents' Experience

Experience was recorded on a five-point Likert scale ranging from strongly disagree to strongly agree. We considered an agreement with the statement if the participants selected either agree or strongly agree with this question. A high proportion of participants had a very positive experience of virtual appointments. Most young people and families reported feeling prepared for the virtual appointment (88%), found them helpful (90%), felt they were confidential (88%) and would find further virtual appointments helpful (86%).

Table 2 presents the themes derived from questions 7 to 9 of this survey (Table 1) such as perceived positive and negative impacts of the virtual consultations and desired improvements to future virtual appointments. Responses to

Table 2 Identified Themes Regarding Impact of Virtual Modality to the Consultation

	Themes	Number of Respondents	Quotes
Perceive	d impacts on the consultation		
Positive	No need to travel	18/47 (38%)	"These appointments have been really helpful and have had the added benefit that we haven't needed to travel, which can be difficult when my child has CFS. Thank you"
	Continuity of care/support during COVID-19 lock-down	17/47 (36%)	"The virtual method has helped to keep my daughters care going when we have been unable to see the team."
	Less stressful	6/47 (13%)	"It has saved me stress on coming into the actual hospital"
Negative	None reported	16/41 (39%)	"We didn't find a negative, the people we spoke to were very good at explaining things to us, especially the physiotherapist who had to explain exercises."
	Not seeing the person's face/no body language	7/41 (17%)	"[It] loses visual clues and is more challenging to build relationship with the doctor and patient"
	Difficulty to build therapeutic relationship/Less personal	6/41 (15%)	"There is still a lack of connection and safety, but that is only due to the technology not the people"
	Bad connection/Technical Issues	5/41 (12%)	"The connection kept dropping so this made the whole process pretty challenging."
Desired i	mprovements for future virtual	appointment	
	Nothing to improve	18/32 (56%)	"For them to continue unless a medical examination is needed"
	Providing good quality video call	11/32 (34%)	"A safe video link and a good connectivity on both sides will improve the system tremendously."

Notes: 47/50 respondents provided at least one answer for positive impacts and 41/50 respondents provided at least one answer for negative impacts. 3 most common positive and 4 most common negative themes are presented. Only 32/50 participants provided an answer for desired improvement to virtual consultation.

Dovepress Proulx-Cabana et al

the reformulation of these questions provided similar responses and showed good alternate-form reliability for this part of the survey.

Provision of a Confidential Space for the Young Person

As part of one question of the survey, data about who participated in the consultation with the professional were obtained. We found that slightly more than half of our participants (52%) were seen with their parents present for the whole consultation while 10% of consultations involved parents speaking to professionals without the patient. The remaining 36% is composed of consultations where young people were spoken to alone for the whole consultation (12%) or parents and young people were seen together but separate space was offered to the young person on their own as part of the appointment (24%). This survey highlighted that about a third of the young people spoke to the professional privately and in confidence remotely away from their parents.

Discussion

In this study, we demonstrated that for young people and their families, the use of virtual consultations was perceived as both positive and safe. Another important theme was an appreciation of the continuity of care despite the limitations associated with the cancellation of face-toface appointments which has been reported in other studies published since the beginning of the COVID-19 pandemic. 16-18 Telephone was more frequently used before offering video alternatives, probably due to appointments being transferred as a default to telephone appointments initially, but also potentially due to Internet connectivity issues for the health professionals limiting the possibility to offer video. 15 Most of our participants felt that there was no negative impact of the virtual modality on the consultation apart from technical issues. This is an important point to consider as poor video quality can lessen the patient's satisfaction with the appointment and become an obstacle to adequate engagement. 19 Our participants also reported that they felt that no necessary improvements needed to be made to the current provision of virtual care. This user perspective should be taken into account alongside previously described barriers to wider uptake including clinician reservations, changes in the therapeutic relationship, reduced non-verbal interaction, maintaining confidentiality, responding appropriately to

risk situations, and complying with appropriate best practice guidelines,⁹ although these concerns were only raised for a minority of participants. Socioeconomic barriers to effective remote consultations need to be considered.¹³

Although the majority of our participants felt that confidentially was not an issue, only 36% of young people consulted with the professional without their parents. ¹² Good practice in adolescent medicine is to offer confidential space as part of the appointment to address sensitive subjects and conduct a psychosocial interview. The risk with virtual appointments is that it is harder to achieve a safe space to discuss these subjects and important biopsychosocial concerns could be missed. ¹³

There are limitations to this study. First, with an aim of obtaining a rapid evaluation of our service provision of virtual appointments, the validity of our survey was only based on content validity provided by our team members and no other formal validity assessment was performed. We also have not piloted this survey first and it would have been useful in providing us means of better assessing validity. Another major limitation is the low response rate of 32% that we had as this could introduce a nonresponse bias to this study, especially if those who chose to complete the survey were mainly those who had a very good experience of this modality. Although we had sent each young person two reminders, our choice to end the survey after 3 months, which was dictated by our clinical needs to obtain rapid feedback into our team's provision of care, might have impacted negatively on our response rate and consequently on the strength of the results of this survey. Also, we chose to keep the survey anonymous, making it impossible to know if our sample was representative of our clinic population in respect to the proportion of previous inpatients and outpatients. As there was missing data from the qualitative questions, emergent themes were not provided by all participants. A major positive theme that came out of this survey is the reduction in the need for travel. This needs to be interpreted in light of the nature of our sample as long journeys are difficult to tolerate for young people with CFS/ME, but has also been previously reported as a benefit of virtual appointments.20

The timing of this study made virtual appointments the default modality that could be offered to patients and 36% of respondents cited continuity of their care during the pandemic as a positive impact of virtual consultations. Previous research found that when a choice of modality is available, clinicians deemed a small proportion of

Proulx-Cabana et al Dovepress

patients as suitable for virtual consultations and most effective for those who they already had a relationship with, while patient advisory groups advocate for a choice of modality for all. It would be interesting to know, when the face-to-face appointment modality is offered again, if young people would prefer it over virtual appointments or if they would favor a mix of both. It is also important that clinicians have a choice in order to ensure confidentiality, equality, safety, that safeguarding needs are met, and that the infrastructure to continue delivering virtual appointments effectively and safely is supported. ²¹

Conclusion

This study provides crucial data about young people's perception of virtual appointments for clinicians and reassurance that the care provided feels safe and acceptable to young people and their families. Professionals should not feel hesitant to offer virtual appointments in their regular practice, in our opinion complementing face-to-face when required and used with caution to ensure that safety, confidentiality and safeguarding are considered. Negative impacts in our population were mainly related to technology difficulties. The main concern that our survey highlighted is that, when dealing with young people, clinicians should not forget to provide a safe confidential space to speak privately without the presence of their parents, even if this is more challenging in a remote consultation. These results should however be considered carefully in light of the limitations of this study including the low response rate, our particular patient sample and the pandemic context in which this study took place. As virtual appointments are likely to continue to be offered now that the structural and technological support surrounding this modality has been implanted in most clinical settings due to COVID-19, we aim to use the experience of this pilot survey in order to assess more reliably the long-term experience of young people and their families outside of a pandemic context.

Acknowledgments

We would like to thank the Treatment and Rehabilitation of Adolescents and Children with Complex Conditions Service (TRACCS) team for their comments on the survey questionnaire and all TRACCS young people and parents that took the time to complete this survey. This survey was registered as a service evaluation within our institution. Ethical approval was not deemed necessary as this survey was conducted anonymously as part of the service evaluation. This survey has not received any specific funding.

Author Contributions

All authors made substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; took part in drafting the article or revising it critically for important intellectual content; agreed to submit to the current journal; gave final approval of the version to be published; and agree to be accountable for all aspects of the work.

Disclosure

The authors report no conflicts of interest in this work.

References

- 1. Hollis C, Falconer CJ, Martin JL, et al. Annual research review: digital health interventions for children and young people with mental health problems—a systematic and meta-review. *J Child Psychol Psychiatry*. 2017;58(4):474–503. doi:10.1111/jcpp.12663
- Tang W-X, Zhang L-F, Ai Y-Q, Li Z-S. Efficacy of internet-delivered cognitive-behavioral therapy for the management of chronic pain in children and adolescents: a systematic review and meta-analysis. *Medicine*. 2018;97(36):e12061. doi:10.1097/MD.0000000000012061
- Payne L, Flannery H, Kambakara Gedara C, et al. Business as usual? Psychological support at a distance. Clin Child Psychol Psychiatry. 2020;25(3):672–686. doi:10.1177/1359104520937378
- Vijayaraghavan S, O'Shea T, Campbell-Richards D, et al. DAWN: diabetes appointments via webcam in Newham. Br J Diabetes. 2015;15(3):123–126. doi:10.15277/bjdvd.2015.032
- Greenhalgh T, Vijayaraghavan S, Wherton J, et al. Virtual online consultations: advantages and limitations (VOCAL) study. BMJ Open. 2016;6(1):e009388. doi:10.1136/bmjopen-2015-009388
- Shaw S, Wherton J, Vijayaraghavan S, et al. Advantages and limitations of virtual online consultations in a NHS acute trust: the VOCAL mixed-methods study. *Health Serv Delivery Res.* 2018;6(21):1–136. doi:10.3310/hsdr06210
- Morris J, Campbell-Richards D, Wherton J, et al. Webcam consultations for diabetes: findings from four years of experience in Newham. *Pract Diabetes*. 2017;34(2):45–50. doi:10.1002/pdi.2078
- 8. Greenhalgh T, Shaw S, Wherton J, et al. Real-world implementation of video outpatient consultations at macro, meso, and micro levels: mixed-method study. *J Med Internet Res.* 2018;20(4):e150. doi:10.2196/jmir.9897
- Barak A, Hen L, Boniel-Nissim M, Shapira NA. A comprehensive review and a meta-analysis of the effectiveness of internet-based psychotherapeutic interventions. *J Technol Hum Serv.* 2008;26(2–4):109–160. doi:10.1080/15228830802094429
- Bokolo AJ. Exploring the adoption of telemedicine and virtual software for care of outpatients during and after COVID-19 pandemic. *Ir J Med Sci.* 2020:1–10.
- Anthony Jnr B. Implications of telehealth and digital care solutions during COVID-19 pandemic: a qualitative literature review. *Inform Health Soc Care*. 2021;46(1):68–83. doi:10.1080/17538157.202 0.1839467
- Ford C, English A, Sigman G. Confidential health care for adolescents: position paper of the society for adolescent medicine. *J Adolesc Health*. 2004;35(2):160–167. doi:10.1016/S1054-139X(04)00086-2

Dovepress Proulx-Cabana et al

- Barney A, Buckelew S, Mesheriakova V, Raymond-Flesch M. The COVID-19 pandemic and rapid implementation of adolescent and young adult telemedicine: challenges and opportunities for innovation. *J Adolesc Health*. 2020;67(2):164–171. doi:10.1016/j. jadohealth.2020.05.006
- 14. National Health Service. COVID-19 information governance advice for health and care professionals [Internet]; 2020. Available from: https:// www.nhsx.nhs.uk/covid-19-response/data-and-information-governance /information-governance/covid-19-information-governance-advicehealth-and-care-professionals/. Accessed August 5, 2020.
- Jnr BA. Use of telemedicine and virtual care for remote treatment in response to COVID-19 pandemic. J Med Syst. 2020;44(7):1–9.
- Banskota S, Healy M, Goldberg EM. 15 smartphone apps for older adults to use while in isolation during the COVID-19 pandemic. West J Emerg Med. 2020;21(3):514. doi:10.5811/westjem.2020.4.47372
- Shokri T, Lighthall JG. Telemedicine in the era of the COVID-19 pandemic: implications in facial plastic surgery. Facial Plast Surg Aesthet Med. 2020;22(3):155–156. doi:10.1089/fpsam.2020.0163

- Grimes CL, Balk EM, Crisp CC, et al. A guide for urogynecologic patient care utilizing telemedicine during the COVID-19 pandemic: review of existing evidence. *Int Urogynecol J.* 2020;31 (6):1063–1089. doi:10.1007/s00192-020-04314-4
- Humphreys J, Schoenherr L, Elia G, et al. Rapid implementation of inpatient telepalliative medicine consultations during COVID-19 pandemic. *J Pain Symptom Manage*. 2020;60(1):e54–e59. doi:10.1016/j.jpainsymman.2020.04.001
- Rao SS, Loeb AE, Amin RM, Golladay GJ, Levin AS, Thakkar SC. Establishing telemedicine in an academic total joint arthroplasty practice: needs and opportunities highlighted by the COVID-19 pandemic. Arthroplast Today. 2020;6(3):617–622. doi:10.1016/j. artd.2020.04.014
- Wherton J, Shaw S, Papoutsi C, Seuren L, Greenhalgh T. Guidance on the introduction and use of video consultations during COVID-19: important lessons from qualitative research. *BMJ Leader*. 2020:leader-2020-000262.

Adolescent Health, Medicine and Therapeutics

Publish your work in this journal

Adolescent Health, Medicine and Therapeutics is an international, peer-reviewed, open access journal focusing on health, pathology, and treatment issues specific to the adolescent age group. All aspects of health maintenance, preventative measures and disease treatment interventions are addressed within the journal and practitioners from

all disciplines are invited to submit their work as well as healthcare researchers and patient support groups. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: http://www.dovepress.com/adolescent-health-medicine-and-therapeutics-journal

Dovepress





