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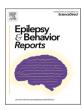


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Exploring patients' views on telephone consultations in the seizure clinic: A qualitative interview study



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ARTICLE INFO	A B S T R A C T
<i>Keywords:</i> Telemedicine Teleconsultation Telephone Seizures	The COVID-19 pandemic brought telemedicine into mainstream medical practice. Although it is widely agreed that telemedicine could be beneficial for patients with seizures, there has been little prior research investigating patients' views on this subject. In this qualitative study, we conducted semi-structured interviews with 10 patients and one companion about their experiences of telemedicine. We also received written thoughts from one additional patient. Participants' views fell under three broad themes. The first, "Convenience and practicality", saw participants praising the flexibility of telephone consultations while noting that such consultations could introduce new practical problems. The second, "(Lack of) shared presence", covered participants' generally negative feelings about not being in the same room as their neurologists. The third, "Situation dependency", saw participants drawing fine distinctions about the circumstances in which face-to-face and telephone consultations, they have concerns about how they may lead to misunderstandings or affect the doctor-patient relationship. These concerns could be assuaged to some extent by offering video consultations or scheduling alternating telephone and face-to-face consultations.

1. Introduction

The Coronavirus Disease 2019 (COVID-19) pandemic prompted a substantial increase in practitioners and patients meeting remotely, either via telephone or over the internet. Research suggests that both parties are generally satisfied with such 'teleconsultations' [1–7]. Specific benefits include a reduction in travel time [8–10] and overall convenience [11]. Concerns have nonetheless been raised about the impact on physical examination [1,12] and other forms of non-verbal communication [13]. A systematic review of comparative communication research found that teleconsultations are significantly shorter than their face-to-face to counterparts, although the impact on other aspects of communication was less clear [14].

The research outlined so far comes from various fields of medicine, and it is likely that patients will experience telemedicine differently depending on the nature of their condition and other variables. One group of patients for whom remote consultations could be especially beneficial are those experiencing seizures. This is because their condition can make travel difficult [15].

Commentators have been generally positive about the potential of

'teleneurology' [16]. In a previously published quantitative comparison of telephone and face-to-face consultations, we showed that telephone consultations for seizures are not significantly shorter or more neurologist-dominated than face-to-face consultations, although the patients in our sample did ask almost three times fewer questions on average over the phone [17]. Survey research, meanwhile, suggests that neurologists and patients are generally satisfied with teleconsultations for epilepsy [18–20], although only for certain types of conversations [18,20].

Although these surveys provide valuable insight into patient and neurologist views on telemedicine, there has not, to our knowledge, been any qualitative research on patients' views and experiences of this new modality in a seizure clinic context. A qualitative observational study did find that companion participation in seizure clinics could be impeded when these clinics were conducted via telephone [21]. Courtney et al. [22], meanwhile, interviewed neurologists about their experiences and found that, while they were generally positive about the efficiency and convenience of teleconsultations, they did not think that they were suitable in all contexts. They were also concerned that not being able to see patients might lead to misdiagnoses.

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Our aim is to extend this earlier research by conducting an in-depth interview study of patients' views on and experiences of telephone consultations in a seizure clinic.

2. Methods

The data for this study were collected as part of a wider study on the use of telephone consultations for epilepsy [17,21]. The participants were either patients or companions who had previously agreed to have one of their consultations recorded during a seizure clinic. Although video consultations were a possibility in this clinic, in practice, all patients ended up having telephone consultations. This meant that the views they expressed during the interviews were related to telephone consultations as well.

Having provided verbal pre-consent to have their consultations recorded, participants were contacted after the consultation to provide written consent. As part of the consent form, participants were asked if they were willing to be contacted for an interview about their consultation and their views on teleconsultations more generally. Ethical permission for the collection of both the recording and the interview data were obtained from the Yorkshire & The Humber – Bradford Leeds Research Ethics Committee (21/YH/0086).

Interviews were semi-structured, with flexibility to deviate and pursue topics that arose spontaneously during the interaction (see appendix for the interview guide). In total, we collected 10 interviews with patients on their own and one interview with a companion (a patient's mother). Furthermore, a patient who had agreed to an interview but had to drop out sent some written thoughts on telephone consultations that were taken into account in the analysis. The average length of these interviews was 32 min, with the shortest being 19 min and the longest being 82 min.

Our sample seemed representative of the patient population seen in a specialist seizure clinic in the UK, although women were overrepresented. Among the patients either being interviewed or being discussed (in the case of the companion interview), there were eight women and four men, with a median age of 56 (range 22-76). The average Index of Multiple Deprivation (IMD) [23] decile¹ among the areas where participants lived was 5.25 (range 1-10). Seven of the patients had focal epilepsies, one had idiopathic generalised epilepsy, one had unclassifiable epilepsy with bilateral tonic clonic seizures, and three had dissociative seizures. Patients with epilepsy were receiving a median of two antiseizure medications (range one to four), with two of these patients also having a vagus nerve stimulator and two having previously been treated with epilepsy surgery. The median duration of the seizure disorders of the participants was twelve years (range three to fifty). Ten of the patients were continuing to experience seizures, while two had been free of seizures for at least six months.

Interviews were transcribed verbatim and analysed by the first author using inductive, semantic thematic analysis [23]. This meant that themes were built upon what patients had said rather than being fit to the structure of the interview guide or any other pre-existing framework. Analysis proceeded across three steps:

- We sorted participant quotes into initial categories. These categories were descriptive, focusing on overt commonalities rather than overarching themes. These initial categories varied in size, with some encompassing several quotes and some containing only one or two.
- 2) We grouped our initial categories together into broader categories. We started by grouping together the larger initial categories before

focusing on the smaller ones. The smaller categories added nuance and helped delineate boundaries; for example, if the larger categories reflected a broad consensus among participants, the smaller categories would often contain alternative perspectives. This process gave us preliminary versions of our three overarching themes.

3) With the overarching themes in place, we developed our sub-themes. These sometimes (though not always) corresponded with the smaller initial categories.

Table 1 shows our final themes and sub-themes.

3. Results

Participants' views have been grouped into three overarching themes: "Convenience and practicality", "(Lack of) shared presence", and "Situation dependency." Where appropriate, these overarching themes have been divided into sub-themes.

3.1. Theme one: Convenience and practicality

Participants noted that face-to-face consultations had a range of practical benefits. They also noted, however, that remote consultations could introduce new practical problems.

3.1.1. Benefits

3.1.1.1. *Flexibility*. Participants noted the flexibility of telephone consultations [Q1-F],² attributing this particularly to the lack of travel required [Q2-G]. This meant, for example, not having to take a day off work to attend [Q3-E]. Participants also noted the advantages of not having to get up early for appointments [Q4-G] or sit in a waiting room [Q5-C].

3.1.2. Less likely to exacerbate condition

Although participants were positive about the convenience of telephone consultations in general, it was noted that they were especially beneficial for patients whose condition might make it difficult to travel [Q6-D]. One participant noted that in-person consultations were stressful for her, which in turn made it difficult for her to communicate with her neurologist. With telephone consultations, in contrast, she found it less stressful and easier to communicate [Q7-J].

3.1.3. New problems

3.1.3.1. Lack of visual indicators. Participants noted that the lack of visual cues over the phone could be a problem. One participant said that he found it more stressful waiting for a telephone consultation because, unlike a hospital waiting room, there was no visual indication of how long the wait might last. He noted that the stress of waiting could trigger a seizure [Q8-D]. Another participant said that she had not spoken to her usual neurologist during her most recent telephone consultation. She noted that, in a hospital, she would typically be given a warning that this was to be the case; with the telephone consultation, on the other hand, she was taken by surprise [Q9-G]. This same participant said that it was harder to tell how long the consultation was supposed to last over the phone because she could not use the neurologist's body language to gauge when things were wrapping up [Q10-G].

3.1.3.2. Other problems. Participants noted the difficulty of finding a quiet, private place to take a telephone consultation [Q11-K], with one participant saying that she felt less comfortable discussing her problems if somebody else was around [Q12-A]. A simple task like showing a

¹ The IMD takes into account various factors (including wealth, education, and healthcare) to arrive at a final deprivation score. The most deprived areas fall into the first decile and the least deprived areas fall into the tenth decile. Our calculations are based on the 2019 indices.

² [Quote number – participant code].

practicality

(Lack of) shared

presence

Table 1

Themes Convenience and

Themes and sub-themes with quotes.

emes with quotes.		Themes	Sub-themes	Quotes
Sub-themes	Quotes			names or anything like that. So
Benefits				obviously I go on who I'm talking to
Flexibility	"But with the telephone			by the faces" [Q20-I]
	consultations, it's much easier to			"[It] would be nice to actually visually see the person before so if
	maintain something and dip in and			you have to go into hospital, then
	out of something" [Q1-F] "But in fact of traveling and things			you're aware of who that person is"
	like that, it is much, much easier for			[Q21-G]
	me" [Q2-G]		Treatment impact	
	"So [with a face-to-face		Communicating and	"It can be quite difficult to explain
	consultation] you're basically taking		requesting information	symptoms, especially physical
	out a full day at work, aren't you?"			symptoms, over the phone" [Q22-K]
	[Q3-E]			"Maybe I should've asked more
	"'Cos normally the appointments are			questions, which I think might have occurred to me [face-to-face]" [Q23-
	in a morning. So I have to be up very early" [Q4-G]			D]
	"You're not traveling somewhere or			"So I might say I'm okay with that,
	sat in a waiting room" [Q5-C]			but actually I might not have fully
Less likely to exacerbate	"I can see the logic of people who are			understood what has been said But
condition	having difficult epileptic attacks in			I think on the telephone you might
	not going" [Q6-D]			not pick up on that" [Q24-G]
	"[I]t is really helpful with being able		Neurologist's	"[I]f a patient is right in front of you,
	to do this without having fear and		understanding of	you can kind of tell that, okay, the
	anxiety" [Q7-J]		condition	expressions are a bit off there" [Q25-
New problems	"Dut if you're sitting a stually waiting			A] "[S]ometimes I have these
Lack of visual indicators	"But if you're sitting actually waiting for a telephone call, it's actually far			dissociations. But on a telephone
indicators	more stressful than if you were			consultation, you wouldn't probably
	sitting in a hospital outpatients			realise." [Q26-G]
	waiting to be called [W]ith my			"[I]t appears [my neurologist] thinks
	epilepsy, it can create an attack."			that my memory's quite good. When
	[Q8-D]			it's actually not really, I'm just
	"[W]hen you go into hospital			reading from paperwork that I've
	you're normally told if you're going			had in the past" [Q27-J]
	to see somebody else Whereas on		Positive impact	"I do tend to go on a lot with
	the telephone you just presume			voices. So, like I say, his voice, I felt comfortable" [Q28-J]
	you're going to speak to who your letter tells you you're going to speak			"I did feel more as if I was getting a
	to" [Q9-G]			completely determined interaction,
	"[Y]ou sort of start wondering, 'How			just with me" [Q29-C]
	long is this consultation?' I can't pick		Video calls as an	"[Y]eah, [video calls are] probably a
	up on that body language." [Q10-G]		alternative	better option" [Q30-E]
Other problems	"I had to go and sit in my car in the			"You hardly just want to get
	work car park, 'cos there isn't an			specifically ready [for] a video
	extra room that I could go into in			consultation. You'd much rather just
	work" [Q11-K]	Situation	Situational factors	head out" [Q31-A] "You could almost sort of put them
	"If somebody else is around,	dependency	Situational factors	into grades, couldn't you? And the
	sometimes you're just not as comfortable discussing any	dependency		different types of calls that are
	problems" [Q12-A]			required" [Q32-E]
	"I would've been able to show the		Condition	"If it's something physical that you
	consultant videos rather than			need somebody to look at you
	having to upload each video			can't do that over a telephone" [Q33-
	individually" [Q13-K]			H]
	"Because obviously you can be in an		Focus of the	"If I've not got anything to speak
	area where the signal's not great"		consultation	to them about then obviously [a
	[Q14-E]			telephone call is] easier" [Q34-I]
	"But to be on the telephone, obviously unless you've got it on			"Sometimes you probably want to be with a doctor, you need them to look
	speaker, that's quite difficult to			at something or touch something"
	interact with both of you" [Q15-G]			[Q35-C]
	"I wouldn't want [consultants] to		Doctor-patient	"I think everybody should certainly
	be under pressure" [Q16-C]		relationship	see their consultants before they
Interpersonal impact	"[Y]ou can read their body language			even start telephone calls" [Q36-D]
	[face-to-face] So it does feel more			"[I]f you've met them or you've seen
	like a more personable experience."			them and then you have further
	[Q17-K]			telephone conversations that's
	"You just feel more connected to			fine" [Q37-G] "Because I know this consultant
	your doctor [face-to-face] rather			"Because I know this consultant you can detect things like smiles in
	than distant" [Q18-A] "[W]ben you're on the phone, you			someone's voice and things like that"
	"[W]hen you're on the phone, you conduct yourself differently" [Q19-			[Q38-C]
	K]		Importance of	"I still think that that they do need to
			continued access	see you, you know, every so often"
	"Since having brain surgery unless		commuted access	

(continued on next page)

Table 1 (continued)

Themes	Sub-themes	Quotes
		"[I]f you're seen sort of six-monthly, then maybe sort of once a year, that you see the person, and the rest you have a telephone consultation, so therefore you do catch up with your consultant at some point" [Q40- G]

neurologist a video of a seizure could be made more complicated and time-consuming remotely [Q13-K], and a bad phone signal could also be an issue [Q14-E]. One participant said, unlike face-to-face or video consultations, her husband did not join her during telephone consultations because it would be difficult for the neurologist to interact with two people at once [Q15-G]. One participant said that, while she herself found telephone consultations faster and more convenient, she was worried that they might create more work for neurologists [Q16-C].

3.2. Theme two: (Lack of) shared presence

Participants talked at length about the impact that not being able to see and be in the same room as their neurologist had on their consultation. They noted both the interpersonal impact (i.e. on the doctorpatient relationship) and the impact on their treatment. Generally, this impact was seen as negative, though there were exceptions to this.

3.2.1. Interpersonal impact

Participants said that talking on the phone felt less personal [Q17-K], making it harder to build a connection with the doctor [Q18-A]. Effective communication could be more difficult remotely, with one participant noting a difference in how they conducted themselves between the two modalities [Q19-K]. One participant said that, due to memory issues, she relies on faces to know who she is talking to, which makes telephone consultations especially difficult [Q20-I]. Another participant said that she found it difficult speaking to a neurologist whom she had not met before because she would not recognise them if they were to later meet in person [Q21-G].

3.2.2. Treatment impact

3.2.2.1. Communicating and requesting information. Participants said that it was harder to communicate and request information remotely. One participant said that symptoms were harder to explain over the phone [Q22-K]. Two participants said that they found it harder to ask questions remotely, with one saying that he would have asked more questions about medication specifically had the consultation been face-to-face [Q23-D]. One participant said that, due to difficulties caused by her condition, she might say that she understood or agreed with a decision when in fact she did not. She felt that a neurologist in a face-to-face consultation would pick up on this because of her body language or facial expression, but that this might not be the case over the phone [Q24-G].

3.2.2.2. Neurologist's understanding of condition. Participants worried that neurologists might have an incomplete or inaccurate understanding of their condition without being able to see them [Q25-A]. One participant said that a neurologist might not pick up on her having a dissociation over the phone [Q26-G], an issue that was exacerbated by her husband not being present for telephone consultations. Along similar lines, another participant said that she had, during her recent consultation, been referring to notes from previous consultations. While she found this useful, she worried that because the neurologist could not see her doing so, he might have got the impression that her memory was better than it really was [Q27-J].

3.2.3. Positive impact

Although participants generally saw the lack of shared presence as a downside, this was not always the case. One participant said that, because she was partially sighted, she felt comfortable with just her neurologist's voice [Q28-J]. Another participant said that communication in the telephone consultation was generally better and more focused because there were fewer external distractions [Q29-C].

3.2.4. Video calls as an alternative

Participants overwhelmingly said, if available, they would prefer video calls to telephone calls [Q30-E]. A notable exception to this was a participant who said that she preferred the non-visual nature of the telephone and that, because she would have to get ready for a video consultation anyway, she would rather just go in for a face-to-face appointment [Q31-A].

3.3. Theme three: Situation dependency

Although some had a strong, general preference for either face-toface or remote consultations, overwhelmingly, participants drew fine distinctions about when each type of consultation would be appropriate.

3.3.1. Situational factors

Participants identified multiple factors dictating which type of consultation was appropriate. As one participant noted, consultations could be put into "grades", with certain factors determining which communication medium was most suited [Q32-E].

3.3.1.1. Condition. Participants generally felt that if a condition had a strong visual or external physical component, it would require a face-to-face consultation or video call [Q33-H]. However, in the absence of such overt somatic manifestations, they felt that it could be managed over the phone.

3.3.1.2. Focus of the consultation. Aside from the general condition, participants also said that the focus of the consultation played an important role in determining which type was more suitable. For catch-up, review, or otherwise 'minor' appointments, the telephone was seen as more appropriate [Q34-I]; for consultations involving tests or physical examination, a face-to-face consultation was seen as more appropriate [Q35-C].

3.3.1.3. Doctor-patient relationship. The doctor-patient relationship also played a role in determining which type of consultation was suitable. For initial meetings, face-to-face was seen as better [Q36-D], but telephone calls were seen as acceptable once the relationship was established [Q37-G]. Expanding on her rationale behind this point, one participant said that, because she knew the neurologist well, she was able to tell when he was smiling even in the absence of a visual [Q38-C].

3.3.2. Importance of continued access

Even if they did see telephone consultations as suitable most of the time, participants emphasised the importance of continuing to have face-to-face access [Q39-J]. Some participants suggested a system whereby regular telephone consultations could be broken up by occasional face-to-face consultations [Q40-G].

4. Discussion

The aim of this article was to explore patients' views on the use of telephone consultations in a seizure clinic. Based on in-depth exploratory interviews with ten patients and a companion, plus written thoughts from one additional patient, we have presented three thematic categories. The first, "Convenience and practicality", saw participants generally extolling the practical benefits of being able to speak to their neurologists over the phone, including reduced travel time and flexibility. Some participants noted, however, that teleconsultations could introduce new practical problems.

In the second theme, "(Lack of) shared presence", participants talked about the impact of not being in the same room as their neurologist. While some participants did not have a problem with this (or even found it an advantage), others found it difficult for both interpersonal reasons (they found it harder to build rapport over the phone) or instrumental reasons (they found it harder to convey their point or they worried that the neurologist might get the wrong impression about their condition).

The third theme, "Situation dependency", saw participants drawing fine distinctions about when teleconsultations and face-to-face consultations were appropriate. Teleconsultations were seen as appropriate when the condition or symptom under discussion could be conveyed verbally, when the consultation was a catch-up or otherwise 'minor', and when there was an existing doctor-patient relationship. Face-to-face consultations were seen as appropriate when physical examination or tests were required and when there was no existing doctor-patient relationship. Participants also made it clear that, even if they were largely in favour of teleconsultations, it was important to have access to face-to-face consultations where necessary.

In some respects, our findings are aligned with those of earlier survey and qualitative research from both patient and practitioner perspectives. The benefits of reduced travel time and greater convenience that were frequently noted by participants in this study have been noted in earlier research [8–11], as have concerns about the lack of shared presence and physical examination [1,12]. The participant who said that they were concerned that the neurologist might not be able to gauge their level of understanding or agreement in teleconsultations parallels a neurologist in Courtney et al.'s [22] interview study, who said that the phone made it difficult to "check to understand that [the patient has] taken it in or they agree with what you're saying" (p. 455). The patients who said they asked fewer questions over the phone are reflected in our recent statistical comparison, where we do indeed show that patient questioning is significantly lower in telephone consultations [17]. This statistical comparison also shows that telephone consultations were less likely to be accompanied, which is supported by the patient who said that, due to the practical difficulties, her husband did not join her for her remote consultations. This point is also reflected in our qualitative observational study, where we highlight how the telephone can act as a barrier to companion participation [21].

The fine distinctions that participants drew about when teleconsultations were and were not appropriate are also in line with earlier research. Several participants, for example, said that they thought telephone consultations were better suited to follow-ups. This is in line with Ramaswamy et al. [6], who found that 'new visit' patients expressed lower satisfaction with telemedicine consultations, and Banks et al. [19], who found that patients were happy to use telemedicine as long as their condition was stable. White et al. [24] similarly found that GPs saw it as important to see new patients face-to-face, while a clinician interviewed in Courtney et al. [22] noted that they found it "very, very unsatisfactory" (p. 455) meeting news patients over the phone. Kristofferson et al. [18] found that neurologists saw telemedicine consultations as better suited to follow-ups as opposed to new patients, and the neurologists surveyed in Conde-Blanco et al. [20] overwhelmingly saw teleconsultations as unsuitable for discussing certain topics (e.g. Sudden Unexpected Death in Epilepsy).

Similarly, several participants in the present study suggested that, due to the nature of their condition, they did not see regular face-to-face contact as important. This is in line with Kristofferson et al. [18], who found that neurologists saw epilepsy as better suited to telephone consultations than multiple sclerosis and movement disorders. It also mirrors Courtney et al. [22] where neurologists "perceived some specific groups of patients as particularly challenging to assess in remote consultations" (p. 456). Von Wrede et al. [10] meanwhile, found that patients continued to want "low frequent or on demand onsite appointments" (p. 2) alongside telephone consultations, which echoes our finding that even patients who were positive about telemedicine did not see it as a wholesale replacement for face-to-face contact.

To our knowledge, this study has provided the first qualitative insight into how patients with seizure disorders in the UK feel about telemedicine. The qualitative, inductive [23] nature of our analysis and findings means that, as well as expressing views in line with earlier studies, patients had the opportunity to expand upon their views and offer perspectives that have not, as far as we are aware, been found in existing research (which has tended to focus on the neurologist's point of view).

Several of our participants, for example, offered vivid descriptions of the experience of waiting to have a seizure clinic appointment, including, in one case, the anxiety that the stress of waiting might trigger a seizure. The participant who described having notes and potentially coming across as more knowledgeable as a result likewise offered an insight into the information asymmetries that telephone consultations create from the patient's perspective. Participants also had a chance to offer perspectives that might seem counterintuitive, such as telephone consultations being more focused or, due to the patient's personal preferences, more personable. These, along with other examples from our findings, shows that exploring the patient's perspective in depth can generate insights that a survey would not.

A key limitation of this study is that it was conducted during the COVID-19 pandemic. This could have had an impact on participants' feelings towards telemedicine, either positive (e.g. because teleconsultations eliminated the risk of exposure to the virus) or negative (e.g. because they were being 'forced' by circumstance into using telemedicine). Regardless, it is difficult to know how much the views expressed in this study will carry over to a post-pandemic world.

Another limitation of this study is that all participants had had a telephone rather than video consultation. Given that participants generally said that they would prefer video calls if they were available, and given that questionnaire studies suggest that telephone consultations are associated with lower satisfaction than video [7,9], it may be that our findings are only applicable to telephone consultations.

5. Conclusion

Patients are generally satisfied with telephone consultations from a practical perspective, especially when the appointment is for a routine check-up or a 'minor' matter. They are less sure about the use of telephone consultations for more complex matters, worrying that the neurologist might miss something or that they will not be able to convey their condition verbally. They are also concerned about the impact on the doctor-patient relationship. These concerns could be assuaged to some extent by offering video consultations or scheduling alternating telephone and face-to-face consultations.

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7. Ethics

This study was given ethical approved by the Yorkshire & The Humber—Bradford Leeds Research Ethics Committee (21/YH/0086).

CRediT authorship contribution statement

Joseph Ford: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition. Markus Reuber: Writing – review & editing, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix:. Interview guide

Background information

Please tell me a little about your recent neurology appointment.

- Was your recent appointment a first or follow-up appointment? (If follow up: How long have you been under the care of the neurology department in [Hospital]? Did you speak to a doctor you had met before or had you never met the doctor face-to-face?).
- Did you do anything to prepare for the appointment?
- Was the consultation by phone or by video-link?
- Were there any technical problems with the call (including difficulties connecting video calls)?
- Where did you take the telephone or video-phone consultation call?
- Did you have anyone with you during the call? (If so: Were they in the room or did they join separately? Did they participate or just listen in?)
- Did the doctor have anyone with them during the call? (If so: Were they in the room or did they join separately? Did you feel comfortable with this?)
- Before the pandemic, how would you have got to an outpatient appointment at the [Hospital]? (car / public transport / requiring help from others / how long would the journey have taken).
- Taking into account your relationship with the doctor before the pandemic (or with other doctors you have met face-to-face in the past) would you say that this was a typical conversation in a medical appointment?

Doctor-patient relationship

How do you feel your relationship with the doctor has changed since moving to remote consultations?

- Did the doctor seem to understand you as well as if you had been in the same room?
- Did you understand the doctor as well as if you had been in the same room?
- Did you feel the doctor listened to you?
- Did you feel that you could tell the doctor what you wanted to tell them?
- Was it as easy for you to contribute to any treatment decisions as it would have been if you had been in the same room?
- Were you able to ask the doctor what you wanted to know?

Communication during the consultation

How do you think the consultation would have gone differently faceto-face?

- Were there any specific parts of this consultation where you wished it had been face-to-face?
- Were there any specific parts of this consultation where you were glad that it was not face-to-face?
- Did the doctor spend as much time talking to you as they would have done face-to-face? If not, why do you think that is?
- Did you feel that anything was 'missing' from this consultation?
- (video appointments only): Were you conscious of where you were looking throughout the consultation?

- (video appointments only): Were you conscious of where the doctor was looking throughout the consultation?
- Did you think there were any misunderstandings between you and the doctor during your conversation?
- Was anything different about the way that the doctor asked questions?
- (video appointments only): Do you feel that the doctor's body language was the same as it would be in a face-to-face consultation?
- (audio-only appointments): What was the impact of not being able to see the doctor?

Evaluating

What are your overall feelings on how this consultation unfolded?

- If you could redo this consultation face-to-face, would you?
- How do you think the doctor felt about this consultation?
- Does it feel different talking to the doctor at home rather than in a hospital?
- Would you say that you found it easier or harder to talk to the doctor remotely?
- If teleneurology continues, would you prefer your next appointment as a telephone or videophone call?

References

- Aashima MN, Sharma R. A review of patient satisfaction and experience with telemedicine: A virtual solution during and beyond COVID-19 pandemic. Telemed J E Health 2021;27:1325–31. https://doi.org/10.1089/tmj.2020.0570.
- [2] Bhuva S, Lankford C, Patel N, Haddas R. Implementation and patient satisfaction of telemedicine in spine physical medicine and rehabilitation patients during the COVID-19 shutdown. Am J Phys Med Rehabil 2020;99:1079–85. https://doi.org/ 10.1097/PHM.00000000001600.
- [3] Gustke SS, Balch DC, West VL, Rogers LO. Patient satisfaction with telemedicine. Telemed J 2004;6:5–13. https://doi.org/10.1089/107830200311806.
- [4] Orrange S, Patel A, Mack WJ, Cassetta J. Patient satisfaction and trust in telemedicine during the COVID-19 pandemic: Retrospective observational study. JMIR Hum Factors 2021;8(2):e28589.
- [5] Porche K, Vaziri S, Mehkri Y, Christie C, Laurent D, Wang Y, et al. Patient satisfaction scores with telemedicine in the neurosurgical population. Clin Neurol Neurosurg 2021;205:106605. https://doi.org/10.1016/j.clineuro.2021.106605.
- [6] Ramaswamy A, Yu M, Drangsholt S, Ng E, Culligan PJ, Schlegel PN, et al. Patient satisfaction with telemedicine during the COVID-19 pandemic: Retrospective cohort study. JMIR 2020;22:e20786.
- [7] Satin AM, Shenoy K, Sheha E, Basques B, Schroeder GD, Vaccaro AR, et al. Spine patient satisfaction with telemedicine during the COVID-19 pandemic: A crosssectional study. Global Spine J 2020;12:812–9. https://doi.org/10.1177/ 2192568220965521.
- [8] Fortini S, Espeche A, Caraballo R. Telemedicine and epilepsy: A patient satisfaction survey of a pediatric remote care program. Epilepsy Res 2020;2020(165):106370. https://doi.org/10.1016/j.eplepsyres.2020.106370.
- [9] Vosburg RW, Robinson KA. Telemedicine in primary care during the COVID-19 pandemic: Provider and patient satisfaction examined. Telemed J E Health 2022; 28:167–75. https://doi.org/10.1089/tmj.2021.0174.
- [10] von Wrede R, Moskau-Hartmann S, Baumgartner T, Helmstaedter C, Surges R. Counseling of people with epilepsy via telemedicine: Experiences at a German tertiary epilepsy center during the COVID-19 pandemic. Epilepsy Behav 2020;112: 107298. https://doi.org/10.1016/j.yebeh.2020.107298.
- [11] Agha Z, Schapira RM, Laud PM, McNutt G, Roter DL. Patient satisfaction with physician-patient communication during telemedicine. Telemedicine J E Health 2009;2009(15):830–9. https://doi.org/10.1089/tmj.2009.0030.
- [12] Gomez T, Anaya YB, Shih KJ, Tarn DM. A qualitative study of primary care physicians' experiences with telemedicine during COVID-19. J Am Board Fam Med 2021;34(Supplement):S61–70. https://doi.org/10.3122/jabfm.2021.S1.200517.
- [13] Pype P, Pype K, Rowlands A, George R, Devisch I. COVID-19 and touch in medical encounters. Patient Educ Couns 2021;104:464–6. https://doi.org/10.1016/j. pec.2020.10.023.
- [14] Ford J, Reuber. Comparisons of communication in medical face-to-face and teleconsultations: A systematic review and narrative synthesis. Health Commun 2023, https://doi.org/10.1080/10410236.2023.2201733.
- [15] Kissani N, Lengané YTM, Patterson V, Mesraoua B, Dawn E, Ozkara C, et al. Telemedicine in epilepsy: How can we improve care, teaching, and awareness? Epilepsy Behav 2020;103(Pt A):106854. https://doi.org/10.1016/j. yebeh.2019.106854.
- [16] Guzik AK, Switzer JA. Teleneurology is neurology. Neurology 2020;94:16–7. https://doi.org/10.1212/WNL.00000000008693.

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- [17] Ford J, Reuber M. Face-to-face and telephone consultations in the seizure clinic: A comparative analysis based on recorded interactions. Patient Educ Couns 2024; 123:108171. https://doi.org/10.1016/j.pec.2024.108171.
- [18] Kristoffersen ES, Sandset EC, Winsvold BS, Faiz KW, Storstein AM. Experiences of telemedicine in neurological out-patient clinics during the COVID-19 pandemic. Ann Clin Transl Neurol 2021;8:440–7. https://doi.org/10.1002/acn3.51293.
- [19] Banks J, Corrigan D, Grogan R, El-Naggar H, White M, Doran E, et al. LoVE in a time of CoVID: Clinician and patient experience using telemedicine for chronic epilepsy management. Epilepsy Behav 2021;2021(115):107675. https://doi.org/ 10.1016/j.yebeh.2020.107675.
- [20] Conde-Blanco E, Centeno M, Tio E, Muriana D, García-Peñas JJ, Serrano P, et al. Emergency implementation of telemedicine for epilepsy in Spain: Results of a survey during SARS-CoV-2 pandemic. Epilepsy Behav 2020;111:107211. https:// doi.org/10.1016/j.yebeh.2020.107211.
- [21] Ford J, Reuber M. Comparing companion involvement in clinical telephone and face-to-face consultations about seizures. Health Commun 2023. https://doi.org/ 10.1080/10410236.2023.2218143.
- [22] Courtney E, Blackburn D, Reuber M. Neurologists' perceptions of utilising teleneurology to practice remotely during the COVID-19 pandemic. Patient Educ Couns 2021;104:452–9. https://doi.org/10.1016/j.pec.2020.12.027.
- [23] Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006; 3:77–101. https://doi.org/10.1191/1478088706qp0630a.
- [24] White J, Byles J, Walley T. The qualitative experience of telehealth access and clinical encounters in Australian healthcare during COVID-19: Implications for policy. Health Res Policy Syst 2022;20:9. https://doi.org/10.1186/s12961-021-00812-z.