How has the COVID-19 pandemic affected patients’ experience of pain management therapy?

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Abstract

Objectives: The current service evaluation aimed to explore the impact of COVID-19 on patients’ experiences of pain management therapy. The study examined the barriers and benefits of the move from face-to-face to eHealth methods of delivery.

Design: A service evaluation was conducted in an outpatient pain clinic in an NHS Trust in the East of England. A qualitative approach was taken using semi-structured interviews.

Methods: Participants were recruited through a health psychology service operating as part of a multidisciplinary pain management clinic. Six patients, aged 39–67, were interviewed one-to-one using the online platform Zoom™. During COVID-19, participants had individual or group pain management therapy via telephone or video conferencing. All interviews were transcribed using Otter.ai™ and thematic analysis was performed. The study was approved by internal clinical governance for service evaluations and the authors adhered to the BPS Code of Human Research Ethics.

Results: Three key themes emerged from the analysis; Benefits Aside From Pain Relief, Limited Their Experience, and COVID-19: A Double-Edged Sword.

Conclusion: Findings suggested patients were able to benefit from pain management therapy despite the impact of COVID-19 on daily routines and pain experience. Adopting eHealth methods during the pandemic was an effective means of accessing pain management therapy. These methods allowed patients to continue to benefit from peer support and learn about skills and resources regarding self-management, whilst also improving accessibility for those with chronic pain. Yet, these methods are not without their limitations. Technical issues and difficulties creating therapeutic connections with psychologists limited patients’ experience of pain management therapy.

Keywords
pain management, COVID-19, patient experience

Statement of Contribution

What is already known on this subject?
1. Pain management programmes are more effective than individual therapy.
2. Existing online pain management programmes are designed specifically for online platforms.
3. COVID-19 restrictions and regulations increased pain experience for people with chronic pain.

What does this study add?
• COVID-19 did not impact patients’ ability to gain support and knowledge from pain management therapy.

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• eHealth methods have limitations and contingencies should be put in place by healthcare services.
• Patients should be given a choice of delivery method for pain management post-COVID.

Introduction

Chronic pain is defined as an experience of pain for longer than 3 months. It is both an accompanying symptom of existing conditions and a condition in its own right. Currently, chronic pain affects one-third to one-half of the UK population, is the leading cause of disability on a global scale, and is significantly associated with unemployment and low household income. Hence, governments across the world are beginning to treat chronic pain as a serious challenge to public health. The literature argues chronic pain interventions should use a biopsychosocial framework, as chronic pain has considerable biological factors and detrimental psychological and social impacts. Evidence supporting psychological interventions has found improvements to patient experience and reduced healthcare system costs. Furthermore, interventions using cognitive behavioural therapy [CBT] can reduce pain experience and catastrophizing beliefs. Psychological interventions have also been linked to improved wellbeing and lower rates of depression in chronic pain patients. Thus, psychological interventions should be integrated into the treatment and management of chronic pain.

Pain management programmes [PMPs] are multi-disciplinary treatment plans which comprise physical, educational, and psychological components. They aim to improve patients’ quality of life and increase self-management. Pain management programmes typically last between six and eight weeks and range in intensity, from one hour sessions to eight hour days. Pain management programmes are often delivered to people with heterogeneous pain conditions and are typically delivered in a group environment. However, evidence suggests group settings are not always an appropriate mode of delivery. Individuals suffering from complex psychological conditions or multi-comorbidities may benefit from individual pain management therapy, instead of the group setting. To establish which method is appropriate for patients, healthcare professionals [HCPs] conduct initial assessments and consider the circumstances of a patient’s pain experience. However, during COVID-19, both individual pain management therapy and group PMPs had to adapt to the regulations enforced by the government to continue providing treatment to patients living with chronic pain.

The COVID-19 pandemic directed all non-essential healthcare services to a remote setting following government restrictions. To reduce the spread of the virus, assessments and therapies that originally took place in-person were forced to take place remotely. This change saw HCPs quickly accommodate new delivery methods to maintain care and contact with patients. During the pandemic, there were no guidelines provided to HCPs on the management of chronic pain patients, and so pain management services were left to decide the best delivery method to continue providing pain management therapy during the crisis. Depending on the alternative delivery methods chosen, HCPs had to adapt their communication and clinical skills to compensate for the lack of visual and physical contact with patients. Recent evidence suggests this caused HCPs to feel high levels of self-doubt, anxiety, and worry. Additionally, HCPs may have experienced trauma or loss during the pandemic which impacted their ability to provide care to patients. Hence, the sudden move away from in-person sessions to alternative methods may have caused difficulties and extra pressure for psychologists providing pain management interventions.

Yet, despite the difficulties for HCPs, it was extremely important for pain management therapy to continue. Evidence suggests pain experience likely increased for many chronic pain patients during COVID-19 as a result of government restrictions. A multitude of psychosocial factors potentially caused this increase, such as personal loss, worry about financial loss, and increased anxiety. Restrictions such as self-isolation impacted pain experience through increasing people’s feelings of loneliness; a feeling strongly associated with increased pain experience, depression, and fatigue. Self-isolation has also been associated with a heightened awareness of pain symptoms and fear of infection, which can cause patients to fear travelling to a public medical setting to seek medical attention. Previous evidence proposes untreated chronic pain can increase depression rates by 50% and leads to a 35% increase in suicide ideation, feelings that are linked to increased pain. Further to this, patients were likely to adopt passive coping strategies for their pain during lockdown, which can increase depressive symptoms and suicide ideation, therefore increasing the likelihood of pain morbidity and mortality occurring. Therefore, it was extremely important for healthcare services to continue providing pain management therapy using alternative delivery methods to reduce the negative impacts of the restrictions implemented during COVID-19.

As a result of this importance, alternative delivery methods needed to be chosen to continue delivering
pain management therapy during the pandemic. Before COVID-19, eHealth delivery methods, such as telephone and video conferencing, were being trialled to deliver pain management interventions. However, during the pandemic, eHealth methods were the only alternative option that adhered to government restrictions. Research indicates eHealth delivery methods are beneficial for patients with chronic pain. They are associated with improved quality of life and reduced healthcare costs for patients with pain conditions. Telephone communication provides an inexpensive alternative to face-to-face sessions and enables HCPs to reach a large population. Additionally, this type of intervention has been found to reduce pain intensity in patients with chronic pain. Video conferencing was also a popular delivery method during the pandemic, with the use of platforms such as Attending Anywhere and Zoom. These video conferencing platforms allowed HCPs to physically see patients and communicate in real-time whilst adhering to social distancing rules. Therefore eHealth methods provided HCPs with sufficient alternative options to deliver pain management therapy to patients during the pandemic.

Furthermore, evidence demonstrates eHealth methods are effective in reducing barriers for patients. Existing online PMPs have been found to reduce stigma, provide timely information, and provide accessibility for isolated groups. Additionally, patients attending online PMPs have shown reduced levels of disability, anxiety, and depression after treatment, compared to those who did not attend a programme. A reason for this could be because online PMPs allow patients to complete programmes without feeling pressured to meet HCPs expectations, a feeling that may occur during face-to-face sessions. Additionally, patients have self-reported increased life satisfaction at 3 and 6 months when they have completed an online PMP. This long-term efficacy is arguably caused by patients learning to self-manage their pain in a comfortable and familiar environment that allows them to maintain these newly learnt behaviours. Hence, online PMPs may be beneficial for providing long-term pain management for patients with chronic pain, presenting a viable alternative to face-to-face delivery.

However, contradictory evidence suggests online interventions may not be appropriate for patients who experience chronic pain. These types of programmes have little involvement from psychologists and provide generalised educational resources for patients. Nevedal, et al. found patients with complex comorbidities were more likely to benefit from a personally tailored, disease-specific approach that comes from individual face-to-face therapy. Face-to-face individual interventions provide patients with the opportunity to receive unique care, tailored to the demands of their condition. However, despite the effectiveness of in-person sessions, uptake of face-to-face sessions is significantly higher in patients from affluent areas and in patients of older ages, whereas online interventions are accessible across socioeconomic backgrounds and ages. General internet-based programmes are also cost-effective for the healthcare system compared to individually tailored sessions. Thus, despite online pain management tools providing generalised educational information for patients, eHealth can reduce barriers associated with face-to-face sessions.

Even though there are evidence-based benefits of using online PMPs, research tends to focus on the experience of patients who have actively selected this mode of delivery or participated in a randomised trial where they knew online delivery was a possibility. Patients accessing face-to-face pain management sessions prior to COVID-19 were forced to continue their therapy using eHealth methods, such as telephone or video appointments due to government restrictions. This patient population potentially differs from those who specifically choose to have pain management online or participate in a trial. Individuals who self-select online programmes may be choosing them for specific reasons, such as feeling reluctant to seek help in primary care settings, and financial barriers. The remote sessions offered during COVID-19 were arguably different to existing online PMPs, which are readily available to patients and designed for an online platform. These programmes are focussed on self-directed symptom management, and are self-directed and self-paced. However, remote sessions during COVID-19 developed by HCPs were structured to mirror live face-to-face appointments. Healthcare professionals ensured patients attended the sessions at specific times and dates, and the sessions lasted a specific timeframe. Additionally, HCPs using video conferencing expected patients to attend with their video cameras turned on, giving the session a face-to-face and live quality that other internet-based interventions do not require. This allowed HCPs to maintain as much normality within the sessions as possible to ensure the transition from face-to-face to eHealth methods was comfortable for patients.

Furthermore, patients who began with face-to-face sessions, with the hope of joining group PMPs, were also moved to an online setting. It is likely this method was not their preferred choice and may have affected their experience of pain management.
sessions. In-person settings promote social interaction between patients and can encourage mobility in patients with chronic pain. Consequently, the experience of patients who were forced to an online environment will differ from that of patients who consciously selected an online programme. Understanding patients’ experiences of pain management therapy during COVID-19 and how the use of eHealth has impacted patients’ experience of pain management therapy can inform pain management services development post-COVID-19.

**Aim and objectives**

The current study aims to explore the impact COVID-19 has on patients’ experience of pain management sessions. To examine this impact, the study will analyse the barriers and benefits that developed as a consequence of moving from face-to-face to eHealth delivery methods.

**Research question**

How has the COVID-19 pandemic affected patients’ experience of pain management therapy?

**Method**

**Design**

The researchers conducted a service evaluation of pain psychology sessions delivered by a Clinical Health Psychology service as part of a multidisciplinary pain management team in an NHS Trust during the COVID-19 pandemic. Braun and Clarke suggest qualitative research methods produce in-depth, exploratory data, hence this methodology was implemented as the study aimed to explore individuals’ perspectives and subjective experiences. The researcher conducted online semi-structured interviews with individuals who began pain psychology sessions face-to-face and continued with eHealth delivery during COVID-19. The use of semi-structured interviews to explore experiences has been supported by DeJonckheere and Vaughn, who propose semi-structured interviews allow researchers to explore experiences, thoughts, and feelings whilst collecting open data around research topics. The researchers used an interview schedule during data collection, allowing them to maintain high reliability throughout the study.

**Participants**

All participants had previously been referred to Clinical Health Psychology and after initial assessment were offered individual face-to-face sessions, some with the potential to join a group setting after several individual sessions. The inclusion criteria for the study stipulated participants being over the age of 18 years old and having begun individual sessions face-to-face that were moved to an eHealth mode of delivery due to COVID-19 (see Table 1). The pain clinic provided a list of potential participants who met the inclusion criteria. Individuals were excluded if they had serious psychological comorbidities or the Pain Psychology team felt they were too vulnerable to participate. Sixteen potential participants were approached. Ten declined to participate or did not respond, leaving six participants consenting to take part. Despite the small number, this met the suggested criteria proposed by Braun and Clarke for a study of this size (6–15 participants).

**Data collection procedure**

Participants who met the inclusion criteria were approached with an expression of interest email and information sheet (see Supporting Information). A follow-up email was sent a week later to participants who did not respond. For those who did not respond to the email invitations, follow-up phone calls were made to ensure participants had received the invite and per their request, invites were sent again with an attached consent form. If patients wished to take part, they were asked to respond to the email with a completed consent form, then a mutually convenient date and time for interview were agreed upon.

Before the interview, participants were sent a Zoom video conferencing link, with participants asked to join from a confidential space where no one could overhear the conversation. The interviews took between 30 and 40 min. After the interview, participants were emailed a debrief form and thanked for their participation. Otter.ai and an android device were used to record the interviews. Recordings were then transcribed using Otter.ai. All recordings and transcriptions were anonymised and saved on a password-protected laptop. Analysis was conducted by the first author by hand, and checked by the second author.

**Data collection materials**

An interview schedule was written by the researchers to help guide the semi-structured interviews (see Supporting Information). As suggested by Gill et al., the questions were designed to yield the most information possible whilst focussing on the aims and objectives of the service evaluation. The schedule was split into four focal points: initial thoughts around pain psychology and face-to-face sessions, the experience of COVID-19,
feelings towards online/telephone sessions, and future implications and delivery of pain psychology. The schedule consisted of 8 main questions, each question was clear, open-ended, avoided jargon and moved from easy to in-depth focus. Further to the main questions, 12 potential probes were also included, however, based on the advice of Roulston and Choi, the probes were formulated and used relative to what the participant said during the interview. The questions were reviewed by the Lead for Clinical Health Psychology in the pain management team before use with participants. Along with the interview schedule, an information sheet, consent form, and debrief sheet were used throughout the research process for ethical and informative purposes.

**Analytic approach**

Inductive thematic analysis (TA), as developed by Braun and Clarke, was used to analyse the data set. TA allows researchers to identify, organise, and make sense of patterns across data sets. King proposed TA is a useful method for highlighting similarities across data and generating unanticipated themes from an unknown phenomenon. Hence, TA was an appropriate choice for the current study as little is known about how COVID-19 has affected patients’ experience of pain management therapy. Inductive TA, commonly known as a bottom-up approach, is where the analytical process is guided by the data itself. This type of analysis was appropriate for the current study as it allows basic observations to develop into complex understandings of experiences. Braun and Clarke argue committing to an inductive approach leads to a stronger focus on the meanings that participants have made of the world around them. Therefore, taking an inductive approach was appropriate for the current research question due to the prominent focus on patient experience and their unique perspectives and understandings. In contrast, a deductive approach relies on researchers’ pre-existing theoretical understandings to drive analysis. This approach has been associated with quantitative methods and does not provide a deep description of an overall dataset.

Braun and Clarke’s six-phase approach to analysis was adopted. The first author began by familiarising themselves with the data set by reading and re-reading the transcripts, making initial annotations to highlight key points and areas of interest. Initial codes were generated for each data set, taking a semantic focus. Smith proposes semantic meaning refers to the explicit meaning the person is communicating with the researchers. Thus, as the current study focuses on explicit experiences, semantic coding was used. Each interview was coded until themes related to patient experience of pain management therapy during COVID-19 were clearly identifiable across each transcribed interview, and no further new themes were generated. These themes were then reviewed, named and defined across the data set as a whole (see Figure 1). During the write-up process, the final themes were related back to a broader theoretical base and current understanding.

**Ethical considerations**

NHS ethical approval was not required as the study was a service evaluation within an NHS trust. Instead, the appropriate research governance approvals for a service evaluation were achieved. However, the study adhered to The British Psychological Society Code of Human Research Ethics, which states researchers should

| Participant pseudonym | Age | Gender | Pain condition (if disclosed) | eHealth format during COVID-19 |
|-----------------------|-----|--------|------------------------------|-----------------------------|
| Ken                   | 67  | Male   | Degenerative disc disease, diabetes, osteoarthritis and dystonia. | Individual video and telephone sessions. |
| Maria                 | 53  | Female | Fibromyalgia, osteoarthritis and degenerative disc disease. | Video PMP. |
| Daniel                | 55  | Male   | Nerve damage (after an accident) | Video PMP. |
| Taylor                | 60  | Female | Morton’s Neuroma. | Individual telephone sessions. |
| Sarah                 | 39  | Female | Fibromyalgia | Video PMP. |
| Mark                  | 60  | Male   | Vasculitis and kidney failure. | Video PMP. |

*Note. The table demonstrates participant demographic information, such as age and gender. It also discloses the participant’s pain condition to provide an understanding of their pain experience. It also states what type of eHealth method each participant was provided during the COVID-19 pandemic.*

*Note. PMP: Pain management programmes*
respect the dignity and autonomy of participants and ensure they minimise any potential impact on the participants. Consent forms, audio recordings, transcripts and analysis were all saved in separate protected folders to maintain participant confidentiality and these files were only accessible to the research team. After each interview, data were saved anonymously and identifiable data, such as names and places, in the transcripts were replaced with simple descriptors. During the analysis, pseudonyms were used to retain anonymity.

An information sheet was provided to all potential participants to explain the purpose of the study, what was expected of the participants, and their right to withdraw. The consent form required participants to confirm they understood all the information provided to them and consented to their participation. A debrief was sent to participants after their interview, reminding them of the study aims and their right to withdraw. Although it was felt that there was minimal risk of harm to participants, the study focused on personal experience, and therefore the debrief signposted to educational resources and appropriate sources of support should further information be required.

**Reflexivity**

The first author, who was the primary coder for the data, is a female trainee Health Psychologist with a diagnosed chronic pain condition. I acknowledge my ability to relate to participants’ experiences of chronic pain and also the impact that COVID-19 has had on self-management. I understood that I could potentially have an emotional response to participants during the interviews or have difficulty asking specific questions, especially if participants had similar conditions to mine. I recognised that my interpretation of participants’ experiences during analysis may be biased based on my own experiences with chronic pain. Hence, the interpretation should be viewed through the lens of an insider researcher. I devised the interview schedule with support from the second author and the pain psychology team, based on the operation of the pain psychology service, the restrictions COVID-19 initiated on the healthcare system, and existing literature around eHealth and patient experiences of pain management. Therefore I feel the schedule guided the interviews and focused on the research’s aims and objectives. Throughout the analysis, I was conscious of my empathy with the participants but focussed on the data itself and what it showed.

**Analysis**

Six patients from the pain psychology clinic participated in the service evaluation. Reasons for declining the invitation included lack of confidence in using Zoom and lack of time. During the analysis, three key themes were identified; Benefits Aside from Pain Relief, Limited the Experience, and COVID-19: A Double-Edged Sword.
eHealth modes of delivery, the majority of patients felt helped. ‘It was positive to discuss with other people and they were all open and friendly...and to understand how other people approached things. So all of that was, was helpful’. (Mark, p.4;152). These connections between patients extended after the PMP, to patient support groups, ‘So we’re still in touch with each other...it’s really really useful, and I’m glad that, that we were able to do that so we still continue to support each other...’ (Daniel, p.6; 273). Support from others experiencing similar situations can help patients feel less alone in their pain experience, improve their quality of life, and increase understanding of pain through sharing knowledge and experiences. Due to the pandemic restrictions, this would not have been possible for patients during COVID-19 without the adoption of eHealth methods and the continuation of PMPs.

Despite having to attend the pain management sessions in a different environment than originally expected, patients felt they continued to benefit from the sessions and gained an in-depth understanding and knowledge around pain management. Patients felt they were still able to learn about specific self-management skills and topics they may not have been aware of, ‘everything, every issue, every topic was covered on that course, it was utterly brilliant... It blew me away’. (Taylor, p.7;299). This better equipped them with their pain management moving forward as they were able to implement skills they had learnt into their self-management. Patients who attended the online PMP expressed learning about services available to them which they were previously unaware of, ‘...to know that there are others things that are available and that there’s help. ...that was sort of really good...And just knowing you’ve got access to people...’ (Sarah, p.4;172). This was helpful to ensure patients didn’t feel alone in their experience and highlighted resources that can help improve their self-management of their pain, for instance, access to medication reviews or disability-related facilities.

Theme 2 – Limited the Experience

Despite the benefits identified by participants for eHealth modes of delivery, the majority of patients felt eHealth methods also limited their experience. Participants found it difficult to communicate with the psychologists when using eHealth methods, which caused them to feel incapable of building sufficient therapeutic connections with psychologists, ‘my issue, my, my, problem is that I can’t portray over the phone, sort of what I’m going through’. (Taylor, p.4;147). This inability to create open and comfortable relationships between HCPs and their patients potentially impacted patients’ self-management. Arguably this impact on experiences would not have occurred during face-to-face sessions and therefore COVID-19 caused this limitation.

The move to eHealth delivery relied on patients owning the technological equipment to allow them to participate. Yet, some of the patients did not have the equipment needed to participate fully in the online sessions. This consequently impacted their experience. ‘...so I don’t have a laptop. So I used to get my phone...But to get it to work with these different systems has been a nightmare...I managed to get by the second group meeting...’ (Daniel, p.2;93). Daniel’s reflection suggests his lack of equipment and technical knowledge limited his access to the PMP and caused frustration. Furthermore, every patient who attended online sessions recalled experiencing technological difficulties. Participants commented on problems with their internet connection and lack of technological knowledge which caused them to experience problems during their sessions, ‘...they kind of throw me slightly...there’s a lot of erm feedback kind of sounds and strange noises...’ (Ken, p.10;407). Some participants also experienced difficulties engaging with the online PMP material because of technical difficulties experienced by the HCP, ‘She wasn’t always able to transfer from the picture of her to the, to the slides, she wanted to show. I think that happened on quite a few occasions’. (Mark, p.4;166). Hence, technical difficulties with eHealth can cause difficulties with engagement and learning for participants, especially if they have a lack of technical knowledge.

Theme 3 – COVID-19: a double-edged sword

The pandemic enforced restrictions that stopped participants from engaging in their daily routines and activities which were part of their pain self-management. For instance, the lockdowns forced some participants to stop being physically active, an important tool for pain management. ‘I was getting lots of exercises and doing really well and then when the lockdown came all that stopped...’ (Daniel, p.2;73). This suggests the COVID-19 restrictions halted participants’ ability to engage in self-management behaviours, such as...
physical exercise, which consequently affected their ability to manage their pain.

Many participants felt COVID-19 introduced an easier way to access pain management therapy. Despite the negative impact of the pandemic, the majority of participants expressed that eHealth methods allowed them to be comfortable during sessions. They enjoyed the lack of travel, cost-effectiveness, and limited demand on their bodies, compared to face-to-face sessions, ‘...the amount of travel time was nil, which was good. The comfort part of it, I was able to put my feet up not be bothered about anybody else’. (Mark, p.4;177). Further to this, participants felt more relaxed being able to choose their surroundings for pain management therapy, ‘...instead of being sat up, or anything and being in discomfort. I was able to go between laying down...and actually been comfortable in my own surroundings’. (Sarah, p.4; 144). Being relaxed during the pain management therapy allowed participants to reduce their pain experience, gain more from the sessions, and increased engagement. Hence, it can be argued that eHealth introduced a superior mode of delivery for pain management therapy as it reduced barriers such as travel, discomfort, and increased anxiety.

Discussion

The study examined the effect of the COVID-19 pandemic on patients’ experiences of pain management therapy. The authors identified three key themes (see Figure 1). The first, Benefits Aside from Pain Relief, demonstrated how beneficial pain management therapy can be for patients’ quality of life, as well as their pain experience. Creating connections, sharing mutual experiences and understanding of pain with their peers helped participants feel less alone in their pain experience. Chronic pain conditions can cause disabling symptoms which potentially force individuals to disconnect from others and increase feelings of loneliness, which increase pain experience.19 Evidence also suggests self-isolation restrictions implemented during COVID-19 increased the likelihood of loneliness. Isolation from others and lack of access to social support during the pandemic consequently increased pain experience for people with chronic pain.45 Thus, it was important to continue offering PMPs during the pandemic, as decreasing loneliness and increasing peer support are important for self-management of chronic pain.

Furthermore, this theme highlighted patients’ ability to gain knowledge and understanding during pain management therapy, despite being affected by COVID-19. Education is an aspect of PMPs that the British Pain Society10 guidelines state should be a low-intensity method to help promote self-management behaviour change. Participants who attended the adapted online PMPs gained knowledge from the educational aspects of the course which provided them with new skills and resources. These findings align with previous evidence which suggests existing eHealth pain management interventions improve pain experience46 and that patients feel eHealth is an effective way to gain knowledge about pain management.47 Therefore, although COVID-19 forced pain management services towards eHealth methods, this did not hinder patients’ ability to learn and gain a better quality of life from the content of the programme. Moreover, evidence suggests patients who have individual therapy do not receive the same level of educational resources and self-management skills-based knowledge. Therefore, moving forward, HCPs should ensure patients receiving individual therapy are also provided with the same education.

Nonetheless, the second theme, Limited the Experience, suggests eHealth delivery methods are not without their limitations. eHealth methods cause difficulties in building a therapeutic relationship between patients and HCPs. The therapeutic relationship is an interactive relationship that is professional yet caring, with clear boundaries that help make patients feel safe and comfortable.48 However, evidence suggests long periods on screen have been linked to disconnection19 and technical issues common in eHealth methods can be interpreted by patients as a lack of presence.17 This may limit participants’ experience, as therapeutic presence helps build stronger therapeutic alliances and increases the effectiveness of therapy.50 This differs from existing online PMPs where people have little to no live interaction. Existing literature suggests psychologists provide distanced weekly support instead of leading the programme for people in existing PMPs.29,30 Therefore, arguably, existing programmes do not create a strong therapeutic relationship, unlike the programmes created during COVID-19, which may impact patients’ pain management outcomes.

Additionally, as participants had not chosen eHealth delivery methods, they were less prepared to use them. Some participants reported having a lack of equipment and technical knowledge which limited their experience of pain management therapy. eHealth tools only work if the individual is in a position to utilise them.51 If they are not, the risk of social health inequality increases for those unable to access support. Healthcare professionals should be aware of the potential risk of inequality and ensure when offering eHealth delivery methods that they provide patients with multiple access options, such as online conferencing with and without video, or telephone communication. However, during
COVID-19, patients’ access to face-to-face therapy was restricted and patients had no choice but to rely on the technical equipment and knowledge patients had on short notice.

Furthermore, the majority of participants voiced concerns about technical difficulties limiting their experience by causing difficulties in engagement. Previous literature proposes dropped connections and delays to audio and visual components during a PMP have been linked to increased difficulties. To reduce these issues, healthcare services should consider alternatives when using eHealth methods, for example, access to technical support, to ensure patients gain the most out of eHealth methods of delivery. This type of contingency plan was not implemented in the pain psychology service in which the data were conducted, though this is likely to be a result of the rapid speed at which the service had to adapt during COVID-19. Moving forward, healthcare services using eHealth should consider the importance of access to technical support to reduce the barriers experienced by eHealth methods.

The third theme, COVID-19: A Double-Edged Sword identified participants feeling COVID-19 impacted them both positively and negatively. Daily activities that chronic pain patients used to manage their pain symptoms, such as gentle exercise or meeting with support groups, were impacted by the government lockdowns. Effects on daily activities, such as increased inactivity and self-isolation, potentially worsen patients’ pain experience and increased the need for pain management therapy. However, despite the negative impacts on participants' ability to continue self-management activities, participants felt COVID-19 introduced a new way to access pain management therapy with the use of eHealth delivery methods. Video and telephone communication allowed participants to gain the most out of their experience by enabling them to engage with the pain management therapy from a safe and comfortable environment, and reduced the cost and practical barriers associated with travel. These findings support previous literature which proposes eHealth improves patient’s comfort and increases accessibility. Therefore, many patients benefited from the move to eHealth delivery and embraced this change, as they felt it improved their pain experience.

Moving forward, it has been argued that patient preference towards the delivery method of their pain management therapy should be considered by healthcare services to allow them to gain the most out of their sessions. Further to this, eHealth methods reduced transmission of the virus and provided appropriate resources that protected vulnerable patients with severe, chronic conditions. Hence, in the aftermath of COVID-19, healthcare services should not rule out the use of eHealth delivery methods for pain management therapy, especially to those who are classed as vulnerable. Providing patients with the choice between face-to-face and online sessions potentially gives chronic pain patients more control over their self-management and pain experience outcomes.

Implications

eHealth modes of delivery for pain management therapy are constructive and valuable methods of delivery that can reduce the barriers that patients experience during face-to-face sessions. However, technical issues and issues with creating connections suggest healthcare services should be aware of how eHealth methods can create barriers to accessing sufficient pain management therapy and should build in contingencies against these. The results of this service evaluation encourage pain management services to consider providing patients with a choice between eHealth and face-to-face delivery methods post-COVID-19.

Limitations

The current study is not without its limitations. One limitation of the study is the lack of diversity in the age amongst participants. Chronic pain does not discriminate against age and evidence suggests the prevalence of chronic pain in 18–39-year-olds may be as high as 30% in the UK. The average age of participants was 56 years old, thus, the findings may not be representative of the pain population.

Future directions

Further studies may wish to compare the experiences and self-management outcomes of patients who attended the adopted PMPs during COVID-19 to those who attended existing online PMPs by choice during the pandemic. This could potentially advise healthcare services considering the use of eHealth for their pain management in factors that are effective in existing online PMPs. Future research should also look to the support groups that form after patients attend PMPs and consider their effectiveness.

Conclusion

The research has shown that eHealth methods are an appropriate form of delivering pain management therapy and allowed chronic pain patients to benefit from pain management therapy during the COVID-19
pandemic. The evidence supports existing literature that suggests there was an increased need for pain management therapy to continue during COVID-19, as a result of the negative impacts of lockdown restrictions and guidelines. This is useful for healthcare services as they move forward after the pandemic, and aim to increase accessibility and reduce barriers to pain management therapy for chronic pain patients. Overall, the COVID-19 pandemic demonstrated that eHealth methods can be used for pain management therapy and that patients are still able to gain important information and support in their pain management journey. It suggests that, moving forward, healthcare services should take into consideration eHealth methods when deciding how to deliver individual pain management therapy and PMPs after the pandemic.

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