Counseling Veterans with Chronic Pain During the COVID-19 Pandemic: A Secondary Analysis of a Randomized Controlled Trial

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Abstract

Introduction. Veterans with chronic pain could be vulnerable during the COVID-19 pandemic. We qualitatively explored the impact of the COVID-19 pandemic on a sample of veterans receiving brief counseling focused on pain management in an ongoing clinical trial and discuss how the pandemic affected the process of motivating veterans with chronic pain to engage in interdisciplinary multimodal pain treatment at the Department of Veteran Affairs. Methods. Segments of audio-recorded counseling sessions containing content about the pandemic were transcribed and coded to identify key concepts emerging from individual counselor-participant transactions. Themes that emerged were examined with constant comparison analysis. Results. Three major themes emerged. 1) The pandemic caused a disruption in pain management service delivery, resulting in changes to the way veterans receive services or manage their pain symptoms. 2) The pandemic offered opportunities for resilience and personal growth as veterans with chronic pain reflected on their lives and personal goals. 3) The pandemic brought veterans' mental health issues to the forefront, and these should be addressed as part of a comprehensive pain management approach. Discussion. Discussion of the COVID-19 pandemic during pain treatment counseling sessions highlighted negative and positive ways participants were affected by the pandemic. These discussions provided counselors with a unique opportunity to facilitate behavior change by focusing on characteristics of resilience to motivate individuals with chronic pain to adapt and adopt positive behaviors and outlooks to improve their pain experience and quality of life. Conclusions. Counselors can leverage feelings of resilience and personal growth to motivate veterans' use of adaptive coping skills and a wider array of pain management services.

Key Words: COVID-19; Veterans; Chronic Pain; Motivational Interviewing; Resilience

Introduction

The negative impact of the coronavirus disease 2019 (COVID-19) pandemic on people living with chronic pain

has become increasingly clear. Cross-sectional surveys in the United States [1], Canada [2], United Kingdom [3], and Spain [4] have shown large proportions of people with

chronic pain experiencing increased pain intensity, pain frequency, and pain interference during the pandemic. Common reasons for this degradation of pain symptoms include reduced access to in-person chronic pain treatments [5, 6] and biopsychosocial effects of the pandemic, such as public health restrictions (e.g., social isolation, loneliness) and pandemic-related stressors (e.g., worry about infection, school closures, financial loss), which worsen factors that modulate pain-related experiences (e.g., mood, sleep, social support) [7–9].

Veterans with chronic pain could be particularly vulnerable during the COVID-19 pandemic. Up to 50% of male and 75% of female veterans report the presence of pain [10, 11], including significantly higher rates of chronic pain than those reported by civilians [12]. Moreover, these veterans have high rates of comorbid mental health conditions like anxiety, depression, post-traumatic stress disorder, and substance use disorders [13–15], all conditions that have become more prevalent in the general population during the pandemic [16]. Mental health problems exacerbated by the pandemic could, in turn, adversely affect veterans' ability to manage their chronic pain [17].

The Department of Veteran Affairs Health Administration (VHA) has established an acclaimed collaborative multimodal stepped pain management treatment approach for veterans [18–20]. This approach emphasizes an interdisciplinary approach to pain management that involves pain referrals, management from primary to specialty care providers, incorporation of nonpharmacological pain treatments, and treatment of comorbid conditions. Making veterans aware of available pain-related treatment and motivating them to engage in these services is a critical clinical task.

We currently are conducting a pragmatic multisite randomized controlled trial testing the effectiveness of a motivational interviewing-based [21] intervention delivered by phone to engage veterans with chronic pain into Veterans Affairs Healthcare System (VA) pain care. To target veterans early in their VA treatment, the trial recruits post-9/11 veterans who are applying for VA disability benefits for musculoskeletal conditions that were caused by or worsened during their military service. Extensive details of the trial and intervention are provided elsewhere [22, 23]. The trial began recruitment in October 2019 and continued to enroll participants through the declaration of a public health emergency in the United States in March 2020 [24]. As public health restrictions, face-to-face health care inaccessibility, conversion to virtual care, and pandemic-related stressors grew, the trial counselors and participants touched upon these matters during some of their phone counseling sessions because they were affecting the participants' pain experience and motivation to engage in pain care.

In this report, we qualitatively explore the impact of the COVID-19 pandemic on a sample of veterans in the trial who received the intervention. The purpose of this analysis is to better understand how the pandemic is affecting veterans' pain management and elucidate experiences that serve as barriers to and facilitators of better pain management. Specifically, we examine transcripts of sections of intervention sessions in which counselors and veterans talked about the pandemic and its effect on their lives and pain care. We then discuss how this information affected the process of motivating veterans with chronic pain to engage in interdisciplinary multimodal pain treatment at the VA and modifications made to the intervention to accommodate the shifting VA pain care system.

Methods

Description of the Parent Study

This ongoing two-arm, parallel-group, 36-week, multisite, controlled trial randomly assigns veterans applying for VA disability benefits across eight VA medical centers in New England to either the counseling intervention or usual care. Participating veterans must have served after 9/11; be seeking service connection for a back, neck, knee, or shoulder condition; report an average of four or more on the pain severity scale of the Brief Pain Inventory [25]; and not be receiving more than two pain treatment modalities at the VA. Assessments are collected at baseline and at 12 and 36 weeks. Main outcomes include pain severity and interference and use of nonpharmacological pain services. All study methods have been reviewed and approved by the VA Central Institutional Review Board and Yale University Human Investigation Committee and have been published ClinicalTrials.gov (NCT04062214).

Two counselors deliver the intervention. The counseling is a manualized motivational interviewing-based fivesession phone-delivered intervention, with four sessions occurring over an initial 12-week period and an additional booster session offered between weeks 12 and 32. All sessions are audio-recorded. The aim of the sessions is to motivate veterans to engage in multimodal nonpharmacological pain care to reduce their pain symptoms. The first session includes an orientation to the counseling, exploration of the veteran's pain experience and motivation for pain care, psychoeducation about the benefits of multimodal pain care, and screening for substance misuse. Follow-up sessions entail checking in with participants on their progress toward the goals developed during the first session (e.g., connecting with a primary care doctor; starting a new pain treatment), continued motivational enhancement, and addressing ongoing obstacles. Monthly, one of the study's co-principal investigators (SM) reviews two sessions per counselor to assess the integrity of intervention delivery and then meets with the counselors to provide performance feedback and coaching. Ways to address pandemic-related stressors arising in sessions are discussed during these monthly counseling supervision meetings.

Session Selection

This qualitative study was initiated in January 2021 when 246 participants had been enrolled in the study and 127 of them had been assigned to receive the study intervention. Counselors followed the manualized study procedures; no additional prompts were added to specifically elicit pandemic-related deliberations. Conversations related to the pandemic came up organically during the counseling sessions (e.g., when participants discussed pandemicrelated stressors or changes in their routines, like reduced/ increased work hours, working from home, or lack of child care, that affected their mental health and perceptions of pain) or were elicited by counselors when discussing barriers to treatment access and motivation (e.g., inability to schedule a pain treatment appointment because the pandemic caused the clinic to reduce capacity or temporarily close). Both counselors identified all participants with whom they had discussed pandemic-related issues. They then listened to all available sessions of these participants and transcribed segments leading up to and including pandemic-related discussions. See Figure 1.

Data Analysis

We used procedures informed by grounded theory methodology, a systematic approach to deriving qualitative themes from textual data [26]. We first conducted open coding in which two investigators (CML, SM) identified key concepts emerging from the language used within the individual counselor-participant transactions assigned codes (descriptive phrases) to the text segments. These codes were used to create a top-level codebook that was applied to all qualitative data. Coding was performed and discussed by the investigators, and the codebook was refined until agreement was reached. Themes that emerged in the session segments were examined for similarities and differences in perspectives in a process constant comparison analysis [26]. Subsequently, prominent themes and quotes exemplifying each were presented to the research team and refined.

Results

Altogether, 85 veterans had a recorded counseling session between March 2020 and March 2021, with a median of two recorded sessions per participant during that time frame (interquartile range [IQR] 1–4, mean = 2.4, standard deviation [SD] = 1.4). Sessions had a median length of 62 minutes (IQR 42–128, min = 13, max = 313). Participants were mostly male (88%), white (79%), and non-Hispanic (84%). Average age was 38.8 years (SD = 11.0). More than half the sample were married or remarried (55%), a quarter were single and never married (26%), and 18% were divorced. Participants had served a median of 4.0 years active duty (IQR = 3–8, mean = 6.9, SD = 6.4 years) and served in the Army (45%), Marine Corps (24%), Navy (19%), and Air

Force (14%). Almost two thirds of participants (n = 54, 64%) had received special combat pay for having been assigned to or deployed to a combat zone during service.

Of the 85 participants with recorded counseling sessions at the time of analysis, counselors identified 43 individuals with whom they recalled having pandemicrelated discussions. Counselors reviewed all recorded sessions of the 43 possibly pandemic-related discussions, 40 were confirmed to be pandemic related and these 40 confirmed sessions were then transcribed. Three major themes emerged from transcribed sessions and are presented below: 1) The pandemic caused a disruption in pain management service delivery, resulting in changes to the way veterans receive services or manage their pain symptoms. 2) The pandemic offered opportunities for resilience and personal growth as veterans with chronic pain reflected on their lives and personal goals. 3) The pandemic brought veterans' mental health issues to the forefront, and these should be addressed as part of a comprehensive pain management approach.

Theme 1: The Pandemic Caused a Disruption in Pain Management Service Delivery, Resulting in Changes to the Way Veterans Receive Services or Manage Their Pain Symptoms

Social distancing mandates and COVID-19 safety protocols disrupted traditional access to health care, disproportionately affecting those in active treatments. Participants reported pain management services being canceled or postponed. When health care services were suddenly stopped because of pandemic shutdowns, participants had to rely more on methods that could be done at home and noted a reversal in some recent improvements in the amount of pain they were experiencing.

I had a verifiable decrease in back pain. Unfortunately for about 2 weeks now I haven't been going in. My PT [physical therapy] appointment's been rescheduled. They pushed my appointments in acupuncture to [2 months away]. And then massage right now is temporary down until we can figure out what's going on. Hopefully, when things are able to be stabilized a bit, I can go back to the schedule that we talked about, because it was working. (Male, 30s)

One participant noted having to increase pain medication dosage to compensate for canceled nonpharmacological modalities.

It was going so well and then it all stopped. Yeah, I mean everything stopped. So of course, I had to increase my Flexeril because after a while it just, I mean, it's been a couple of months where I haven't been able to have chiropractic or acupuncture or anything. (Female, 50s)

One participant noted difficulty switching from inperson treatments to telehealth care and expressed skepticism about its benefits.

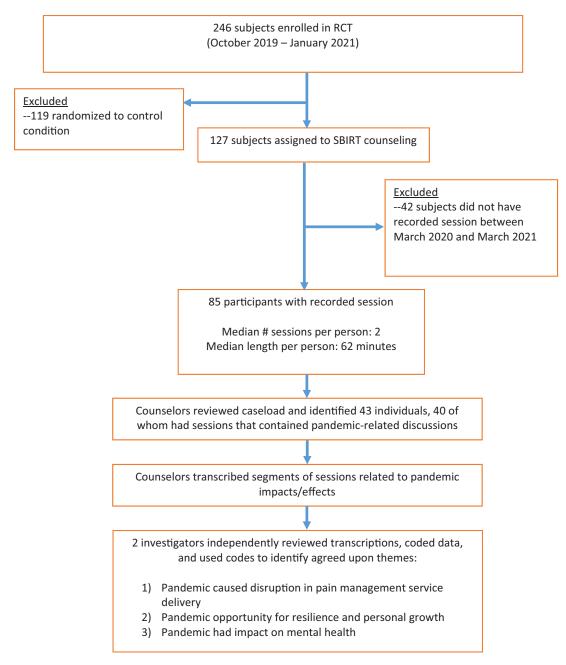


Figure 1. Consolidated Standards of Reporting Trials (CONSORT) flow diagram.

I did reach out to my primary care like you said to do, and I had talked about the back pain, and she set me up with a consult for physical therapy, so we had an initial meeting over the phone. I wasn't really quite expecting what the appointment was going to be about, so I wasn't prepared. I was in my car on the way home from work, and she wanted me to get on camera and do all these kinds of moves and things. I said I can't right now. I'm driving. I don't know how much benefit I can get from over the phone physical therapy, but I figured I'd give it a try. (Male, 30s)

Another participant expressed nervousness about having to restart pain treatment.

I have an appointment starting then where they kind of have to do the whole initial consult again, because it's been so long. I'm feeling a little anxious to get this all going again with the chiropractor and the acupuncture. (Female, 50s)

Theme 2: The Pandemic Offered Opportunities for Resilience and Personal Growth as Veterans with Chronic Pain Reflected on Their Lives and Personal Goals

Some participants recognized a silver lining to the pandemic in that it prompted them to change their lifestyles and behaviors in a way that brought about new

opportunities. One participant described how becoming more involved in the community became a form of selfcare.

As far as my pain goes ... staying mobile and being active has helped. I've joined a community bike ride, so every Wednesday we get together, and we ride and then we stop somewhere at the end and kind of hang out but that's been really good, because it's a form of exercise and a little bit of camaraderie. I need it and honestly the isolation kind of shows me how important it really is. One of the things that I'm starting to do is that I'm pushing to get more involved in the community. So, I've been sitting down and talking to some of the local community leaders. I'm pushing to do a community panel with the police in our community. It helps. It just keeps me busy and it's good to be involved in stuff. (Male, 30s)

Other participants reflected on how the sudden change in lifestyle from the pandemic fallout also caused a change in mindset with regard to work-life balance.

Right now, it's all balance. It's all time management and all balance. I think COVID and the shutdowns and all that helped me focus on what I couldn't focus on just working. (Male, 40s)

Some veterans recognized their strength and perseverance and used this as an opportunity to pursue pain treatments despite recent COVID-19–related setbacks.

I am a big proponent of not giving up. Just to keep on trying things [to deal with the pain] till you ain't got nothing left. You just learn how you are during a crisis. (Male, 30s)

One veteran learned how to advocate for herself in multiple areas, and consequently, she developed more opportunities for pain management, and her outlook became more positive.

I wanted to tell you the acupuncture is going really well. I got telehealth for psychiatry now and they'll be able to do that while I'm away ... I'm stoked. So, everything's working out really, really well right now. It seems like the universe, God, whatever, really brought some good things in my life. I'm glad I took the chance, ya know? I could have just thrown it in the trash. Except for some of the physical and emotion pain that I have, I'm feeling really good for the most part. More reasons to keep living. When we first talked, I was feeling really desperate. And now I just feel really reassured that people do actually care and that there are things that can be good for me out there. I just needed to be pointed in the right direction. I would have waited around for my appointments instead of being a self-advocate. It's kinda cool. I'm feeling really positive about it. (Female, 40s)

Theme 3: The Pandemic Brought Veterans' Mental Health Issues to the Forefront, and These Should Be Addressed as Part of a Comprehensive Pain Management Approach

Besides disruption to pain management services, there was disruption to other health care services, including mental health and addiction services. One participant talked about how his substance use treatment was affected by the pandemic:

I need those [Alcoholics Anonymous (AA) meetings] a lot. I was going to meetings—5 a week. And now with the pandemic they cancelled on me. They have them online, but the zoom, its not the same. I tried it once and I didn't like it.... I don't enjoy those or like them as much because of the privacy factors.... I still keep in touch with my AA sponsor. We talk a lot and he's in the same boat. He's caught up in this pandemic stuff and there's not much you can do about it. (Male, 60s)

The uncertainty around the pandemic caused a lot of fear. Concerns about getting sick or infecting others were prevalent and affected how participants interacted with the world. Participants reported an array of life areas that changed in response to the pandemic and how their mental health was affected by these changes. One participant reported how stress was affecting multiple areas of his life:

My job under normal circumstances really isn't stressful, which is why I liked working at my job but now it's like with all this craziness going on. It's like, you know, now a job that wasn't really stressful at all is stressful because all of this craziness. (Male, 20s)

Another veteran noticed an exacerbation of mental health symptoms:

I slowly started getting [anxiety attacks] again when all this crazy [expletive] started going down back end of February beginning of March. I was worried I was going to lose my job and then, you know, I am not the kind of person who would panic I don't react like that, but my thing is that I keep stuff, you know? I don't really show emotion, so I kind of just let it boil up and then, uh, it just takes me back. Um, especially now, I noticed I am getting a little bit more lately. (Male, 20s)

Many participants indicated difficulty maintaining exercise and self-care activities, which adversely affected physical and mental health:

You can't do anything. I can't really do any of the hobbies I like to do. I can't really do anything. Everything is closed down, so the things I like to do to relieve stress—I go to the gym; I go to the range, you know, shoot my toys, play with toys at the range—I don't get to do anything like that anymore. (Male, 20s)

My avenues to relieve stress and help with my anxiety aren't really there anymore so you are like, you can only do so many sit-ups and push-ups inside your room. You know? Going to gym and interacting with people, doing all the stuff that is actually more effective, I don't have that avenue anymore so I can only walk the same loop around my block so many times. (Male, 20s)

Discussion

The COVID-19 pandemic introduced significant challenges to veterans with chronic pain conditions seeking multimodal pain care at the VA. Veterans living with chronic pain conditions have been susceptible to negative pandemic effects due to barriers to accessing pain management services, disruption to associated health care services, and heightened stress from pandemic conditions.

Inability to access usual pain treatment services was a prominent theme in counseling sessions and was a major pandemic challenge for our participants and others [5]. For example, 50.5% of Americans with chronic pain reported postponed or canceled mental health treatment appointments, 68.0% reported canceled or postponed physical therapy appointments, and 79.2% reported canceled or postponed complementary medical treatment appointments [27]. Meeting this challenge has required a transformation of the health care delivery system as providers adopt and grow telehealth services for pain care. A challenge will be in providing medical therapy, behavior therapy, physical therapy, physical activity, and mindbody practices as virtual services that provide benefits like in-person care [28]. Although telehealth does not address the need to touch, palpate, and move patients, it has the potential to reach more people in remote locations and improve access to a wider array of multidisciplinary specialty services [29]. A telehealth appointment before in-person treatment affords time to collect history, initiate education, set expectations, and develop a therapeutic relationship. Some modalities—including psychological therapies and physical exercise interventions—can be done fully remotely with outcomes that are comparable to face-to-face therapies [5]. Adoption, however, will take time, as veterans have expressed concerns about privacy and lack of confidence in virtual modalities, and best practices are still being developed to address the access and equity barriers (e.g., broadband access) that exist [30].

Participants reported changing the way they manage their chronic pain during the pandemic. Their experience is corroborated in other studies reporting pandemic effects on people living with pain. In one online survey, significant proportions of Americans with chronic pain reported a negative impact of the pandemic on their pain management; 20% of respondents reporting engaging in self-management practices less than usual, and 5%

reported no longer engaging in self-management practices because of the pandemic [27]. In another survey of Spanish residents with persistent or chronic pain, more than half the sample (54%) reported a change in the way they coped with pain due to the pandemic, with resting (54%), stretching (48%), and medication increases (46%) being the most common coping strategies [4]. Consistent use of pain self-management strategies is associated with better outcomes in pain, disability, and depression even after controlling for cognitive processing variables (self-efficacy, catastrophizing, fear-avoidance beliefs) [31]. Exploring options for pain self-management at home and enhancing motivation to start or continue to engage in these practices could make a substantial impact in how well participants adapt to their post-pandemic lives.

Despite the challenges of living in a global pandemic, veterans described resilience, personal engagement, and growth. Thus, there is the potential for the pandemic to enhance motivation for positive behavior change. A qualitative analysis from a small sample of patients with chronic pain showed similar themes of resilience and acceptance, but a large proportion of "neutral" themes suggested that maintenance of homeostasis was also a significant coping strategy for the chronic stressors from the COVID-19 pandemic [32]. Importantly, psychological resilience appears to be related to modifiable factors. In a study of psychological resilience during the COVID-19 pandemic, individuals with greater resilience were those who tended to exercise and go outside more, had greater social support, slept better, and prayed [33].

Understanding the factors that are associated with greater resilience can help counselors facilitate adaptive coping skills and behaviors. As noted by Tucker (2021), who worked with combat veterans from Iraq and Afghanistan living in New York City during the COVID-19 pandemic [34], motivational opportunities exist in itemizing the unique experiences, training, and characteristics developed during their service and using them to help veterans recognize coping skills they possessed to address pandemic challenges. Sharing initiative-taking characteristics and coping skills to manage social isolation with others and seeing communities come together to face a shared trauma helped clients build self-efficacy and foster positive feelings.

Discussing pandemic challenges during counseling provides a unique opportunity to leverage negative experiences into positive personal growth. Challenging life circumstances leading to positive psychological changes have been observed in people facing a wide variety of traumatic events: bereavement, challenging health diagnoses, combat experiences, and hostage situations [35]. The concept—encompassed by terms such as post-traumatic growth, perceived benefits, positive psychological changes, flourishing, and discovery of meaning [35]—refers to character traits and adaptive perspectives that are strengthened or developed through the navigation of

traumatic experiences [34]. A central element of posttraumatic growth is that one's willingness to explore never-before-considered opportunities expands when life choices become limited. Counselors in our study helped motivate veterans' positive behavior change and willingness to try new approaches to treat their pain (e.g., use of more online self-care tools or physical activity like walking) given reductions in available formal pain treatment services during the pandemic.

Another theme that emerged from counseling session was increased fear and anxiety from getting sick or from the general uncertainty and unpredictability of life during a global pandemic. These findings of deteriorating mental health conditions are consistent with extant literature. A study of people with chronic pain in the United Kingdom found that those with chronic pain reported greater self-perceived increases in anxiety, depressed mood, and loneliness and decreases in physical exercise after the emergence of COVID-19 and social distancing regulations [3]. Research suggests that the long duration (not necessarily the catastrophic event) of stress and vocational uncertainty caused by the pandemic in multiple areas of life simultaneously pose a risk of increased pain and other somatic symptoms [36]. The VA offers many free virtual mental health resources for veterans, including apps to support self-care and mental health. There are also robust video and phone tele-mental health options at the VA. Educating veterans about the available mental health resources and reinforcing the importance of maintaining connections and seeking help during this transitional time could be just as important as addressing the physical pain treatment needs of this chronic pain population. Psychological flexibility skill sets that focus on creating balance in life domains and being aware of behaviors that uphold values have been shown to moderate the impact of COVID-19-related distress, anxiety, and depression [37].

Our study has several limitations. Like all qualitative research, our findings are not statistically representative of all veterans or all people living with chronic pain. Our data are drawn from a small sample of veterans applying for VA disability benefits who were enrolled in a VA research study in New England. Furthermore, all data extracts come from participants who were receiving counseling designed to help them engage in multimodal pain care. A major aspect of this counseling focused on motivating veterans to explore different pain treatment modalities and how to problem-solve access issues. The presence of a counselor discussing pain and helping facilitate conversation with pain care providers likely impacted respondents' perceptions of their pain and how they navigated the health care system during a particularly difficult time and colored veterans' experiences. Another limitation is that our analysis drew from preexisting counseling sessions. Discussions of the pandemic and the pandemic's influence came up organically or from probes around difficulties gaining access to services; specific questions were not developed a priori to elicit experiences of living with chronic pain during a pandemic.

Conclusion

The themes that emerged from pain-focused counseling sessions in a clinical trial conducted during the COVID-19 pandemic highlight some of the opportunities and challenges encountered by veterans with chronic pain. Findings from this qualitative analysis underscore the importance of maintaining multidisciplinary pain management care—including mental health care—during the pandemic. Utilizing telehealth and virtual services or a hybrid model of pain care will be key to offering expanded access to multimodal care and may ultimately offer veterans with chronic pain the best way forward. For veterans and for the health care system, the pandemic offers opportunities for improved pain management based on resilience and adaptation. It will be incumbent on our counselors to guide veterans in these directions.

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