

Exploring Expressive Writing with Patients With Chronic Pain During Primary Care Visits

Cassandra C. Sundaram, MS; David G. Thoele, MD; Mary F. Henningfield, PhD; Jen Zaborek, MS; Shelbey Hagen, MSec

ABSTRACT

Background: Patients living with chronic pain may feel frustrated with and neglected by clinicians who care for them, leading to negative health care experiences. Clinicians may struggle to find new ways to engage and connect with patients experiencing chronic pain. Both patients and clinicians may benefit from expressive writing by potentially improving communication and creating a deeper sense of connection within medical visits.

Methods: An expressive writing activity, the Three-Minute Mental Makeover (3MMM), was conducted with 15 patients living with chronic pain during primary care visits with 5 UW Health family medicine physicians. Patient and physician experience using the 3MMM was measured using pre- and post-visit surveys and individual interviews.

Results: Both physicians and patients viewed the experience of doing the 3MMM together positively. We identified 8 key themes from individual follow-up interviews with patients and physicians: (1) opening the door, (2) insight into the doctor/patient as a person, (3) peer-to-peer communication, (4) closeness and connection, (5) comfort and relaxation, (6) unexpected learning, (7) unexpected value to patients, and (8) vulnerability and self-disclosure. The most commonly reported barriers to physicians using the activity in practice were lack of time and persuading other physicians to do the activity.

Discussion: Patients with chronic pain and the clinicians who care for them may benefit from an expressive writing exercise, such as the 3MMM, in the key realms of building relationships, communication, and trust.

BACKGROUND

Chronic pain affects 50 million adults in the United States and, along with intense physical symptoms, is associated with burdensome psychosocial comorbidities, including anxiety and depres-

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Author Affiliations: Department of Family Medicine and Community Health, University of Wisconsin School of Medicine and Public Health (UWSMPH) (Sundaram, Henningfield, Hagen); Biostatistics and Medical Informatics, UWSMPH (Zaborek); Advocate Children's Hospital, Park Ridge, Illinois (Thoele).

Corresponding Author: Cassandra C. Sundaram, MS, Research Specialist, 909 Dartmouth Ave SE, Minneapolis, MN 55414, phone 608.769.3439; email sunda063@umn.edu.

sion.¹ Open communication and confidence in their clinicians may help patients with chronic pain feel better supported in coping with pain.² Increased use of interventions that promote empathy and understanding between the patient and clinician has been recommended to benefit both patients who have chronic pain and the clinicians who care for them.³ We chose to study a guided expressive writing activity—the Three-Minute Mental Makeover (3MMM)—based on work demonstrating that it both reduced stress and improved communication among patients, parents, and clinicians in a pediatric setting.^{4,5} Although it has not been used in adult patients or patients with chronic pain, we hypothesized that the 3MMM could be used with adults with chronic pain during family medicine clinic appointments and may reduce stress and improve communication between physicians and patients.

The goal of this study was to evaluate the feasibility of using the 3MMM writing exercise for patients with chronic pain and to measure the effect and experience of the activity on patients and clinicians, with focus on the clinician-patient relationship.

METHODS

All study materials and recruitment methods for both physicians and patients were approved by the University of Wisconsin-Madison Institutional Review Board.

Five family medicine physicians practicing at UW Health in Madison, Wisconsin, were recruited via a recruitment email that invited recipients to participate in a research study about expressive writing with patients with chronic pain. All physicians were affili-

ated with the Department of Family Medicine and Community Health at the University of Wisconsin School of Medicine and Public Health. Physicians were trained in the use of the activity through a 1-time, 1-hour virtual workshop, following the protocol used by the 3MMM developer (author DGT) and received an optional script to use with patients.⁴ They were instructed to write at the same time as their patients and to share and discuss their answers to the following prompts afterwards:

- 1) Write 3 things you are grateful for (be specific).
- 2) Write the story of your life in 6 words.
- 3) Write 3 wishes you have.

Physicians identified 10 to 15 potentially eligible patients under their care. Patients were to have a diagnosis of chronic pain and were excluded if future appointments included specific urgent medical concerns unrelated to chronic pain. Patients with an upcoming appointment within the enrollment period (the subsequent 6 months) were sent a letter inviting them to participate in the study along with a study information sheet. Follow-up calls were conducted by the study team to gauge patient interest and complete enrollment. After patients were enrolled, a research coordinator met with each patient before an upcoming primary care visit during which they agreed to do the activity. Pre- and post-visit surveys were administered to both patients and physicians.

Follow-up interviews were conducted with patients after their visit and with study physicians at the end of the study period. Interviews were conducted over the phone, recorded, transcribed, and deidentified.

Results were analyzed using mixed methods. Interview transcripts were evaluated using qualitative methods based on a phenomenology framework. Two coders (SH, CS) reviewed the transcripts from both patients and physicians, and each coder independently developed a codebook. The coders met and finalized the codebook, which was used by a third coder (MFH). Coded data were reviewed by all 3 coders for thematic analysis. Descriptive statistics (n, %) or mean (SD) were reported for patient and physician characteristics and survey responses. On patient surveys, 4 Likert outcomes were coded from 1 through 5 and current pain used a scale of 0 to 10 (0=no pain and 10=the worst pain you can imagine). Changes were assessed using paired Mann-Whitney-Wilcoxon tests. Analysis was conducted using R, version 4.1.3 (R Core Team, 2022).

RESULTS

Recruitment materials were sent to 44 potential participants. Of those contacted, 26 were excluded (declined, did not have chronic pain, or could not be reached and/or had no appointment during the study period). The remaining 18 were enrolled in the study, and 15 of 18 participants completed the activity with their primary care clinician. The majority of patient participants who completed the activity identified as female and

Table 1. Patient Characteristics^a

Characteristic	n (%)
Age	
Age < 45	5 (33)
Age 46-65	4 (27)
Age > 65	6 (40)
Please describe the gender identity or identities with which you best identify	
Female	13 (87)
Male	2 (13)
How would you describe your ethnicity?	
Not Hispanic or Latino	15 (100)
How would you describe the race(s) you best identify with? (Please select ALL that apply) ^a	
White	14 (93)
Black or African American	2 (13)
American Indian or Alaska Native	2 (13)
What type of chronic pain do you have? (Please select ALL that apply) ^a	
Back pain	10 (67)
Neck pain	5 (33)
Cancer-related pain	1 (7)
Trauma-related pain	1 (7)
Headache	6 (40)
Other	10 (67)
How long have you lived with chronic pain?	
10 years or less	5 (33)
> 10 years	10 (67)
Are you currently taking any opioid medication (such as morphine, oxycodone, hydrocodone, or others) for your chronic pain?	
Yes	6 (40)
Have you used journaling or expressive writing to cope with stress or pain in your life?	
Yes	7 (47)

^aOptions with no responses are not shown. Categories may add to more than 100% when patients selected more than 1 option. "Other" categories for type of chronic pain included the following responses: stomach pain, leg pain, hand pain, arthritis, underarm pain, whole-body pain, shoulder pain, fibromyalgia.

White (Table 1). Most patients were older than 45 years and had experienced pain for more than a decade. Slightly more patient participants currently were not taking prescribed opioid medication for treatment of their chronic pain, and half of them had used journaling before to cope with stress or pain in their lives. Types of chronic pain varied, with half of the patient participants identifying multiple areas of chronic pain. The other pain sites listed were marked as the only site of pain (eg, back pain only, cancer-related pain only).

Of the 5 physicians who participated in the study, 3 were male and 2 were female. Three were 5 to 10 years post-residency, and 2 were over 10 years post-residency. Almost all physicians estimated 10% to 30% of their patients had chronic pain, with 1 reporting 70% to 90% of their patients having chronic pain. Most physicians also had prior experience with journaling.

Although results for pre- and post-visit survey questions on experience, empathy, and communication were not significantly different, descriptive statistics showed that most patients reported that there was improvement in communication (responded "excel-

lent,” n = 11 pre-visit (73.3%), 13 post-visit (86.7%); $P=0.157$), increased agreement that their clinician behaved with empathy toward them (responded “strongly agree,” n = 12 pre-visit (80%), 15 post-visit (100%); $P=0.083$), increased agreement that their clinician listened to them immediately (responded “strongly agree,” n = 13 pre-visit (86.7%), 15 post-visit (100%); $P=0.157$), and increased agreement that their clinician understands their health issues (responded “strongly agree,” n = 10 pre-visit (66.7%), 13 post-visit (86.7%); $P=0.102$). Most clinicians reported that the activity took 10 minutes or less (11/13, 85%) and that it was an appropriate amount of time (14/15, 93%), with only 1 response indicating that it took too long to complete the activity (1/15, 7%). The most common barriers identified by physicians to making this activity part of a regular practice were lack of time and persuading other physicians to do this activity.

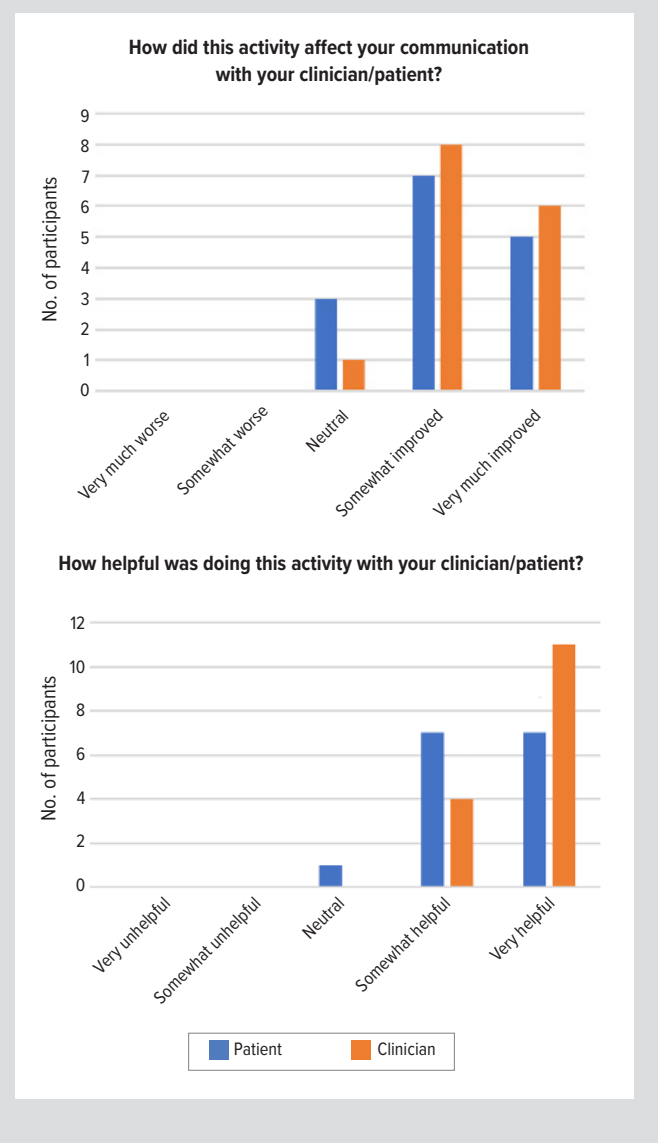
We identified 4 common key themes from individual follow-up interviews with patients and physicians: (1) opening the door to communication, (2) insight into the doctor/patient as a person, (3) peer-to-peer communication, and (4) closeness and connection (Table 2). We observed 1 theme unique to patient experience—comfort and relaxation—and 3 themes unique to clinician experience: (1) unexpected learning, (2) unexpected value to patients, and (3) vulnerability and self-disclosure.

DISCUSSION

People coping with chronic pain may experience serious physical symptoms but are also more likely to experience mental health comorbidities than patients without chronic pain.⁶ The complex nature of chronic pain means that many patients may feel frustrated, stigmatized, and neglected by clinicians due to a perceived lack of empathy, listening, and understanding.^{3,4} Patients are not the only ones who feel disappointed during health care visits; stress and burnout symptoms are common in pain physicians and other clinicians who care for patients living with chronic pain, including primary care physicians.⁷⁻⁹

Our pilot study demonstrated the feasibility of an expressive writing exercise within a primary care visit with patients with chronic pain. Physicians maintained that the activity took a reasonable amount of time to complete within a standard, 25-minute family medicine outpatient clinic appointment. The themes identified from qualitative interviews with both patients and physicians, as well as the positive responses from survey questions, suggest that potential benefits of the exercise include improved communication and connection within the clinician-patient relationship, perhaps leading to observed increased patient perceptions of empathy shown by physicians. The theme of increased comfort/relaxation was unique to patients and may be a result of shifting focus to the activity from other stressors. Physicians reported unexpected learning and value to patients, which could be considered in context of whether the exercise is worth the time within a clinic visit. We believe the theme of insight into

Figure. Number of Patient and Physician Responses Corresponding to Each Likert-type Response Choice



the doctor/patient as a person and the theme of vulnerability/self-disclosure, which was unique to physician experience, may be closely related. Patients seemed to appreciate getting to know their doctor as a person—and although the exercise may have pressed physicians towards greater self-disclosure than usual, this self-disclosure also may be a reason that patients perceived their doctors as more empathetic.

This activity could be useful in settings outside of chronic pain management, as physicians observed unexpected value to and learning about patients, and patients expressed wanting to know their doctors as people. Use of the 3MMM could offer a relatively short way for patients to get to know doctors with whom they do not have as close a relationship and for doctors to better understand new patients. Barriers to the use of the 3MMM identified by physicians include lack of time and persuading other clinicians to do the activity.

Table 2. Themes Identified Through Individual Follow-up Interviews With Patients and Physicians

CATEGORY/Themes	Quotes
UNIQUE TO PATIENT EXPERIENCES	
<p>Comfort and relaxation Several patients talked about feelings of comfort or relaxation while doing the activity. Two spoke about how time pressures or worries about being ill can increase anxiety during a visit, but they did not feel that while doing the activity.</p>	<p>“It just felt more comfortable. It felt like it eased my anxieties of just being scared of what was going on, it took me out of that...whole doctor – you know – sickness thing, and it was just something else.”</p>
UNIQUE TO PHYSICIAN EXPERIENCES	
<p>Unexpected learning All physicians reported that they learned something new about their patients through the activity and that what they learned would be helpful in further care of their patients.</p>	<p>“I didn’t realize too that one of my patients – how close they were to their parents – and...definitely because it’s always like a jumping off point in the future – things like parents or cats – a jumping off point to have a conversation, because I always feel like it opens the door, and then after we chat about that we can move on to other things, but it’s...definitely something to warm things up and get the juices flowing for them to talk.”</p>
<p>Unexpected perceived value to patients Physicians valued the activity more than they thought they would and enjoyed doing the activity with their patients, with potential positive impacts on relationships.</p>	<p>“I initially went into this thinking that [it] is just really manipulative and people are going to look through it and roll their eyes, but they didn’t. People really appreciated that. So I was a little not surprised, but like, wow and maybe it was because I was genuine. I mean, it’s true. I was hoping things for them. And I did say one of the things I was thankful for, I tried to make at least one about them. So I feel like, I don’t know, that it helps communication, but it certainly helps the relationship.”</p>
<p>Vulnerability and self-disclosure Physicians talked about a sense of vulnerability in doing the exercise together with the patients and the concept of self-disclosure as a tool to express caring within the visit.</p>	<p>“But in this sort of a very limited exercise, I felt like the self disclosure actually helped the therapeutic relationship, as opposed to sometimes self disclosure can actually take the attention away from the patient and sort of bring it to you and that’s a danger for people who don’t know kind of how to use it. I feel like in this exercise, it was just enough so that it really helped with the therapeutic relationship. I also felt like it provided me a way to express caring and concern that wasn’t over the top. One patient was like, oh, that was so nice that one of your wishes was about me.”</p>
COMMON TO BOTH PATIENT AND PHYSICIAN EXPERIENCES	
<p>Opening the door to communication Narratives of doing the expressive writing activity together allowed a sense of opening the door to communication as a means of deeper sharing for both patients and physicians.</p>	<p>Patient: “I guess for the moments that we were doing the activity, I just felt a little bit less like a patient...I mean, I like my provider, I feel like [they are] very compassionate, very personable, and yet I’m always there with [them] because I am a patient. And participating in this exercise was not about me being a patient...I think the other thing that this brought is it allowed maybe my provider to see me in a different way too, to see a little glimpse of me, of who I was before, and what my hopes are after.”</p> <p>Clinician: “My sense is that they had an appreciation of the vulnerability of it as well. And my sense was that while maybe uncomfortable to a certain extent, there is sort of a doorway that opened between us that hadn’t been opened before, I guess, is how I envisioned that. And I think because of that...my sense is that there is an appreciation for that opportunity.”</p>
<p>Insight into my doctor/patient Many patients expressed gratitude for the opportunity to learn about their doctors as people, not just as physicians taking care of patients. Deep engagement and being present together with their doctor through this activity seemed important. Several patients noted that they believe this insight might help further develop the relationship they already have with their doctor. Physicians indicated they felt able to learn new and valuable information about patients – even patients with whom they already had a longstanding relationship.</p>	<p>Patient: “I think it actually freed [my doctor] up a lot, to be able to be a person and not a doctor for 10 minutes, if you know what I mean. And so I felt like that increased the warmth of the interaction... Yeah, not be problem-solving so much as like here we are in this moment together, you know?”</p> <p>Clinician: “I felt like not only did it help me sort of glean a little, a few new things about patients, I also think it helped them learn a little bit about me that maybe they didn’t know before and that’s like a whole other thing.”</p>
<p>Peer-to-peer communication Through doing this activity, many of the patients indicated that the nature of the expressive writing prompts and the sharing and discussing of the writing prompts allowed them to connect on a more equal footing with their doctor. In the moments of doing the activity, patients and physicians both mentioned feeling a shift in the relationship.</p>	<p>Patient: “I think learning a little bit more about [my doctor] as far as [they’ve] got kids, [they’ve] got family,...just being able to hear what [they’re] grateful for...I think it kind of brings your doctor down to standard human level, I guess. At least that’s how I feel about it.”</p> <p>Clinician: “I think [they] appreciated knowing that I am a human being. I think [they] always know that, but just kind of being reminded of that. And I think the nice thing about the exercise is it sort of puts you on...the same level for a little bit.”</p>
<p>Closeness and connection Many patients talked about how the activity made them feel in regard to the relationship they have with their doctor. For many, it seemed to deepen a sense of closeness—that they shared something personal with their doctor and, importantly, that their doctor listened and expressed compassion. Physicians spoke about how the activity could further develop elements of the relationship, like building trust.</p>	<p>Patient: “Some of my provider’s responses...said positive things about me or included positive things about me and that felt good.”</p> <p>Clinician: “So I feel like it’s sped things along for establishing care.. I feel like it helped [them] feel connected to me or trust me in a way that maybe would have taken longer. And I feel like I care about [them] and, I’ll remember this activity with [them] forever. ...You know, sometimes – even in primary care where we get to know our patients really well – having some type of extra connection, I think – I feel like, while [they] and I may have gotten there over years working together, I feel connected to [them] in a way that certainly would not have happened so quickly without that activity, and maybe it wouldn’t have happened at all.”</p>

This pilot study had limitations, including small physician and patient sample size and use of convenience sampling for patient recruitment. The study did not evaluate the impact of the use of the 3MMM over time, which could include lessening impact or fatigue for clinicians with repeated use. Larger studies are needed to demonstrate the potential benefits of 3MMM and determine which patients and clinicians might get the most benefit from this exercise. Despite these limitations, this study demonstrates that offering an expressive writing activity during a regular primary care appointment is feasible.

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