

A Pilot Study Measuring Outcomes of Managing Fascial Health for Individuals With Fibromyalgia

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Abstract

This article examines the outcomes of managing fascial health for persons diagnosed with fibromyalgia based on the protocol developed by the author, Dr. Kirstie Bender Segarra, and implemented in a pilot study of five clients. The protocol was designed to improve fascial health through an integrative medicine strategy with lifestyle management including diet changes and supplements, structural integration, and exercises designed to target fascia. An integrative medicine practitioner individually assessed the clients who then met once a month and each received structural integration bodywork at least once a month for three months. The clients had clinically significant reductions in the pain symptoms of fibromyalgia as measured by the Widespread Pain Index.

Keywords: fibromyalgia, fascial health, chronic pain, widespread pain, outcomes, structural integration

Introduction

This article records the results of a pilot study I designed and conducted to determine the importance of treating fascia in clients with fibromyalgia (FM). It is a follow up to the article, “Managing Fascial Health for Individuals With Fibromyalgia,” published in the *LASI 2014 Yearbook of Structural Integration* (Segarra, 2014). A literature review revealed no previous studies that directly addressed fascia in the protocols for individuals with FM. As a structural integrator, I am biased to a particular viewpoint on how disease manifests in the body. I don’t believe we can treat a client holistically nor from an integrative perspective without including fascia in our protocols.

What I learned from this pilot study is that the participants had clinically significant results with decreased Widespread Pain Index (WPI) scores and improvement in symptoms.

The pilot included five clients ranging from age 18 to 73 in three months of treatment. Each client received the minimum requirement of one 90-minute structural integration session per month.

Four received six sessions in the three-month study period. The methods section explains my approach and is followed by individual case study summaries and results.

Before giving the results of the pilot study and to follow up on the topics addressed in my previous article, I’d like to briefly discuss the role of inflammation in FM and how it affects the pain feedback loop.

Inflammation, Fascia, and Feedback Loops

The role of inflammation in fibromyalgia is easy to overlook as most inflammatory markers do not show up in blood tests for clients with FM. However, there has been confusion as to whether or not FM is an inflammatory disease.

Doctors came to believe fibromyalgia was not an inflammatory disease because it doesn’t present like most inflammatory disease. Joints don’t appear swollen. Typical tests for inflammatory markers, which reveal high levels in diseases such as lupus and arthritis, generally reveal normal or only slightly elevated levels in fibromyalgia. In 2012, researchers studying inflammatory myopathies labeled fibromyalgia a “false inflammatory myopathy.”

(Dellwo, 2014, n.d.)

The role of inflammation in FM was studied by Bote et al. and published in *Neuroimmunomodulation* (2012). The study measured the innate response mediated by monocytes and neutrophils in FM patients as an indicator for systemic inflammatory and stress response. The results indicated an inflammatory state accompanied by an altered stress response and suggested that inflammatory-stress feedback dysregulation underlies FM. Another study in 2013 measured the inflammatory markers in patients with FM resulting in high levels of C-reactive protein and pro-inflammatory cytokines (Xiao, Haynes, Michalek, & Russell, 2013).

What I learned from this pilot study is that the participants had clinically significant results with decreased Widespread Pain Index (WPI) scores and improvement in symptoms.

The inflammatory cascade involves many signals including soluble products, such as neuropeptide, lipid mediators, cytokines, and growth factors, most of which can be produced by inflammatory cells. Structural cells can also produce many of these products; fibroblasts, epithelial, endothelial, and smooth muscle cells should be considered as active contributors to the regulation of the inflammatory response (Jordana, Sarnstrand, Sime, & Ramis, 1994). Thus, the fascia making cells, fibroblasts, are also involved in chronic inflammation. “When injury, infection, or local inflammatory processes occur, local fibroblasts stop their primary job of tissue repair and maintenance, change shape, and migrate to local capillary and nerve complexes. They stop making collagen and start making inflammatory components” (Moskowitz & Golden, 2012, n.p.).

In addition, extracellular matrix (ECM) proteins provide structural tissue integrity vis-à-vis their influence on inflammatory cells in the tissue. “In so far as fibroblasts are the main producers of ECM proteins, these new data establish an indirect but important role for fibroblasts in the regulation of the inflammatory response” (Jordana et al., 1994, p. 2012).

Furthermore, fibroblasts are involved in a feedback loop that contributes to the inflammatory process.

In abnormal inflammatory states common to most disease processes, a resonant circuit is set up with the brain, mediated by the constant firing of pain nerves. In the brain, astrocytes and microglia get into the act of perpetuating nerve firing in pain circuits and releasing and directing more inflammatory substances in the periphery. A loop is set up that involves nerve and electrical transmission, taking on a life of its own.
(Moskowitz & Golden, 2012, n.p.)

I want to acknowledge that there is a lot we still do not know about how fibromyalgia arises. However, it is clear to me that fascia is involved and has an inflammatory response, which contributes to the symptoms of widespread pain. I hypothesize that in the practice of structural integration, we intercept this process and stop the fibroblasts from their role in the inflammation cycle so they return to their original job of making fascia. And, as we invite change into the structure through the fascial matrix, there is a correlating change in the central nervous system.

Fibromyalgia and Fascia

A literature review revealed a paucity of research studying fascia treatment for FM. However, my 2014 article explained how systems theory and current research in fascia support fascia treatment protocols for FM. Based on the reasoning outlined in the 2014 article I designed an integrative medicine program including diet and nutrition, herbs and supplements, exercise that targets the fascia, and structural integration.

Study Method

This study focused on the outcomes of managing the fascial health of five clients for three months. I presented my proposal to my doctorate thesis committee and advisors for approval. All clients received a full disclosure with an informed consent that detailed the treatments and protocol and their right to refuse participation in the study at any time. The clients reviewed and signed the informed consent along with a medical intake before participating in the study. I sought clients through the local health network who had been diagnosed with FM. The clients:

- received individual assessments with an integrative health practitioner (myself) which included a review of diet, with supplementation and exercise recommendations to target the fascia,
- experienced a group session that met once a month for emotional support, and

- participated in 90 minutes of structural integration at least once a month for three months; most clients were able to receive bi-weekly treatments.

In this study, the Widespread Pain Index (WPI) was used for assessment before each treatment to score the outcomes. The WPI offered a measure of the effectiveness of the prior treatment. Additionally, heart rate and blood pressure readings were taken at the beginning of each session. Blood pressure readings were taken as they are considered a gold standard criterion of measurement. In fact, a Norwegian study shows an increased hypertension risk for patients with chronic pain and suggests that if the patient has hypertension, she will have chronic inflammation (Olsen et al., 2013).

The WPI Questionnaire began the focus for the interview process. According to the WPI Questionnaire, a client must meet one of following criteria to be diagnosed with FM:

- A WPI score greater than or equal to 7 for Part I and greater than or equal to 5 for Part II (a score of 7/5 or more), or
- A WPI score from 3 to 6 for Part I and greater than or equal to 9 for Part II (a score of 3/9 or more), and
- Experience of symptoms at a similar level for at least three months without a diagnosis of another disorder that would explain the pain.

The top/first (Part I) number in the WPI index indicates the number of areas in which pain is felt. A reduction in the Part I number is reduction of muscular pain. The bottom/second (Part II) number represents a myriad of symptoms including fatigue, mental clarity or lack of, headaches, dizziness, and frequent urination. Thus a reduction in the Part II number is a decrease in general symptoms.

Study Participants

Five women participated in this study. They ranged in age from 18 to 73 and experienced FM symptoms from two to thirty years. Each participant completed a WPI Questionnaire to describe her symptoms of the worst pain in the last three to six months to gain a picture of FM severity. Participants also completed the WPI Questionnaire and rated their symptoms in the week prior to starting the clinical. Also, each time the participant returned for treatment, she filled out a new WPI Questionnaire to assess her symptoms during the previous week.

Four of the five women met the criterion set forth by the WPI for a FM diagnosis. Client 1, who had suffered from FM symptoms for 30 years, fell one point short on the WPI score, because we excluded two of her pain symptoms that were directly related to arthritis in her hands. If we had included the arthritic pain, it would have raised her scores by two points for the top number. In addition, Client 1 had already been managing her FM symptoms with diet and exercise. She had received structural integration in the past, but had not received treatments for one year. It is likely that her beginning scores would have been higher if she had not already incorporated integrative medicine practices.

All clients reported a history of childhood stress or trauma, which I have found to be a factor in FM. Dr. Liptan writes that there is a strong correlation “between childhood trauma or abuse and the later development of fibromyalgia” (Liptan, 2013, p 20).

I directly asked participants how symptoms impacted their daily lives, for example if a symptom of pain became worse after any particular activity. In this way, we were able to establish a pattern of response for the individual and correlate it to the quantum healing techniques outlined by Dr. Amit Goswami (2004) as I will explain more in the discussion section.

Structural Integration

Structural integration strategies were used in the therapy sessions. These practices originated from Ida Rolf, PhD, founder of Rolfing® (Rolf, 1977), and were later developed to include 18 different structural integration training programs in 2010 (Jacobson, 2011). There are many tools and techniques for the application of structural integration. Of primary importance is the direct application of the tool or technique to organize the fascial body. The goal in treatment is to invite balance in the structural system. Although established for a preventive purpose, structural integration has been used increasingly to treat musculoskeletal pain (Jacobson, 2011).

In addition to the structural integration sessions, exercise and nutrition that targeted fascia were included in the protocol. They are not detailed in this article since they are outside the scope of practice for most structural integrators.

Structural integration using the Anatomy Trains™ or myofascial meridians laid out by Thomas Myers

and taught in my KMI training were the primary diagnostic tools used to determine how to approach each client (Myers, 2013). As part of the visual assessment, I used body reading as taught by KMI to identify which lines needed balancing. Due to the limitation of six sessions during the study period, I did not follow the KMI structural integration series strictly from start to finish. Instead, I interpreted what was most important based on my assessment of the client and developed an individualized approach. I addressed the superficial lines—the sleeve—in the first sessions, working with the superficial front, superficial back, lateral, and spiral lines depending on the analysis of the client. By the second and third sessions, I began to release the deep front line after spending some time of the session on a superficial line. Balancing the pelvis and spine were paramount in all sessions. The integration of core work was done slowly, beginning with cranial holds, then moving into a direct SI approach. In the fourth session, I addressed the pelvis and spine, with the balance of the sessions addressing each client’s particular needs. In other words, I followed the general KMI series format (Myers, 2004), but compressed the treatment of the superficial lines in the first session then started to address the core and sleeve in the following sessions. I thought of the KMI series as the template of treatment, which influenced my decisions of the myofascial meridians that needed to be addressed.

After several years of studying under different teachers, I admit that I use a variety of techniques to address the fascial layers within each line. With regards to the pelvis, I am influenced by Thomas Myers’ and James Earls’ work presented in *Fascial Release for Structural Balance* (Earls, 2010). First I assessed the pelvis and identified the shift, tilt, and rotation. In a standing position, I determined tilt by comparing the left and right iliac crests and determined rotation by the ASIS. With the client prone, I used the position of S4 to measure tilt and rotation of the sacrum relative to the pelvis. Then I addressed the appropriate structures to bring the pelvis to a more neutral position. Most of the techniques I used are outlined in the previously mentioned book.

With regards to the spine, Dr. Erik Dalton’s *groove work* adapted from Dr. Rolf (Dalton, 2005) has influenced my treatment as well. However, instead of having the client sit on a bench and roll forward in a seated position, I adapted it to the client lying prone

on the table. I made a “V” shape with my pointing and middle fingers to assess the laminar groove and release the erector spinae muscle group. (The *flying V* technique is shown in Figure 1.) Then I detailed the transversospinales groove muscles, including multifidi and lateral rotator muscles, to improve neutral alignment in the vertebra and balance around the spinal cord. In addition to the direct techniques listed above, I added an indirect technique, also from Erik Dalton’s teaching: “Apply slow sustained pressure to the bony transverse processes to cause a GTO [Golgi tendon organ] stretch receptor release” (Dalton, 2005, p. 111).



Figure 1. The flying V technique to release the erector spinae.

Due to the influence of my cranial sacral training, I also spent time aligning the sacrum for each client with muscle energy techniques, the primary technique being knee squeezes, which is done with the client supine and knees bent. I placed two fists between the client’s knees; then the client inhaled and pressed her feet into table and squeezed the knees with 25% effort. This engaged the pelvic diaphragm while keeping the pelvis on the table. This was repeated, engaging one side at a time, then with both knees. This technique is an efficient way to engage the adductors and balance their influence on pelvic and sacral alignment.

Another concept I incorporated was from Jean-Pierre Barral, DO who stated: “The more precise the movement, the less force required of the manipulation” (Barral, 2005, pp. 21-22), also known as *the law of precision and least force*. With the FM clients I was careful to be very precise with my palpation and limit any painful sensations.

I felt that balancing the pelvis and spine combined with the law of precision and least force were the most critical to relieve pressure on the client's central nervous system and decrease central sensitization.

As a result of the techniques I chose, I realized in hindsight that I addressed what Kirstin Schumaker, KMI graduate, labeled "myoneurofascia" in her *IASI 2008 Yearbook* article, "Threads Within the Fabric" (Schumaker, 2008). She stated "So far I have referred to myofascia and neurofascia as if they are two separate things, but really myoneurofascia is one fabric, and nerves are integral to the material with which we work" (p. 113). I believe that it was my awareness of the nervous system and using the law of precision and least force that allowed change within the client's system.

The client's level of pain due to central sensitization influenced the need for a lighter touch, however, "lighter touch" does not necessarily mean it was pain free. For example, once I established trust with the client, I was able to use tools from my SI tool basket that caused increased sensation such as either lengthening or shortening the tissue depending on whether the client was locked long or locked short within the specific myofascial meridian.

Case Studies

A total of five clients participated in the study. A summary of each case follows:

Client 1: 73-year-old Caucasian female, diagnosed with FM in 1984

Client 1 began experiencing widespread pain after she fell down a complete floor of stairs and suffered a slight concussion in 1984. Her pain increased in 2010 when she fell and broke her right humerus, which required surgery. Her childhood was stressful, emotionally and psychologically. She was the primary caregiver of her mom for over 20 years until her passing two years before the study began. The client worked full-time as a teacher.

The client's primary areas of pain were in the upper back, shoulders, and neck. Structural analysis revealed functional scoliosis of the thoracic spine, left rotated pelvis, and right rotated shoulders. After her first treatment of structural integration (SI), her functional scoliosis was decreased and the pelvis was more neutral.

The client came to realize how important self-care was in order for her to maintain her body. She

expressed that the self-care process initiated by the study helped her reexamine issues in her life and make important changes. Her WPI scores reduced from 6/8 to 4/3.

Client 2: 35-year-old Hispanic female, diagnosed with FM in 2012

Client 2 experienced sexual trauma at age 13, a car accident with severe head trauma in 2003, and a robbery and assault with head trauma in 2010. She experienced chronic lower back and sacrum pain, sciatica, and abdominal pain for three months prior to the study. She was a full-time student and did not work. Visual assessment revealed left rotation and anterior shift of the pelvis.

The client experienced a dramatic reduction in WPI score from 6/14 to 3/6 during the three month study, resulting in a WPI score below the clinical definition of FM. She expressed worry about being able to maintain this level after the study. I reiterated the importance of stretching daily, walking, and maintaining her routine. We discussed familial stress triggers and how to set boundaries so that she could manage her stress levels.

Client 3: 45-year-old Caucasian female, diagnosed with FM in 2004

Client 3 experienced chronic widespread pain for more than ten years. She had a history of sexual abuse as a child. She worked full-time as a massage therapist. Visual assessment revealed a right rotated pelvis, posterior tilt of pelvis, and left rotated shoulders.

The client reported feeling grateful for her participation in the study; it brought her an understanding of where to focus change. She expressed concern about how to manage in the future, but felt confident that she could live without chronic pain. Her WPI score reduced from 9/7 to 1/5; therefore she moved out of the clinical range of having FM.

Client 4: 59-year-old Hispanic female, diagnosed with FM in 2004

Client 4 was in a car accident in 2004 and injured her right shoulder. FM symptoms occurred after the accident. She reported a stressful childhood with alcoholism in the family. I noted left rotation of her pelvis, a right elevated sacrum, anterior shift of the pelvis, and right rotation of the shoulders.

Figure 2. WPI Questionnaire Scores (Scores of 7/5 or 3/9 or higher indicated in a diagnosis of fibromyalgia).

Client	Age	3-6 months prior	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
1	73	6/8	6/8	Sick	6/6	6/6	5/6	4/3
2	35	6/14	6/14	8/15	7/11	5/11	3/7	3/6
3	45	7/6	9/7	19/8	8/1	Sick	2/4	1/5
4	59	17/9	10/7	9/5	Sick	7/5	7/5	3/3
5	18	15/9	15/9	Sick	Sick	12/8	Sick	7/9

The client's WPI Score decreased from 17/9 to 3/3. After the study, she no longer met the criterion for FM. She expressed concern about having a future FM flare-up. I discussed the importance of maintaining her diet, stretching, walking, supplements, and receiving structural integration as needed.

Client 5: 18-year-old Caucasian female, diagnosed with FM in 2004

Client 5 reported chronic pain since she was eight years old. She fell from a horse at age ten and sustained a back injury. At age 14, she suffered a mild concussion from another fall from a horse. She had scoliosis in the thoracic spine. The client stated that she did not eat well and did not exercise. Visual assessment revealed medial tilted calcaneus (bilateral), hyperextended knees, posterior tilt and anterior shift of the pelvis, and left rotation of the shoulders.

The client's WPI score decreased from 15/9 to 7/9. She only attended three of the six structural integration sessions, but received a minimum of one session a month, which met the minimum protocol. Based on her results in comparison to the other study participants, I believe she could experience further improvement with biweekly sessions and could continue to reduce her WPI scores and pain.

Results

One of the major findings of this pilot study was that the WPI score decreased for all participants. Four of the clients' WPI scores were low enough to suggest that they no longer met this diagnostic criterion for fibromyalgia at the end of the study period. Figure 2 summarizes the WPI scores for each session and client.

The following table summarizes the results testing for clinical significance by measuring the percent of improvement (Figure 3). There was an average of 65

to 44 percent reduction of symptoms as reported by the client's WPI Questionnaire scores. In order to test for clinical significance the following calculation was used:

$$\text{Percent improvement} = [(posttest\ group\ mean - pretest\ group\ mean) \div (pretest\ group\ mean)] \times 100$$

The calculation was derived from the mental health profession as a way to test clinical significance (Long, 2011).

Top WPI			
Client	Before	After	Change
1	6	4	33%
2	6	3	50%
3	7	1	86%
4	17	3	82%
5	15	7	53%
Mean/Average	10.2	3.6	
Improvement	65%		
Bottom WPI			
Client	Before	After	Change
1	8	3	63%
2	14	6	57%
3	6	5	17%
4	9	3	67%
5	9	9	0%
Mean/Average	9.2	5.2	
Improvement	44%		

Figure 3. Clinical significance as measured by percent improvement of WPI scores.

Figure 4. Study participants' resting heart rates.

Client	Age	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Heart Rate
1	73	76	Sick	80	84	80	84	Avg. to Poor
2	35	76	76	64	64	68	68	Avg. to Excellent
3	45	68	72	60	Sick	64	60	Good
4	59	68	68	68	Sick	68	68	Good
5	18	76	Sick	Sick	72	Sick	88	Average to Poor

In addition to the WPI Questionnaire, heart rate and blood pressure readings were taken at the beginning of each session. In general the women's heart rates were average to good for their age group. Figure 4 shows a sampling of resting heart rates. Results from the individual participants are shown in figure 5. Heart rates either stayed the same or decreased from the first session to the last for each participant.

The blood pressure readings showed that all clients had pre-hypertension. There was no statistical improvement in blood pressure for the study participants as shown in Figure 5.

When interviewed before a session, all clients stated that they had less pain, improved sleep, and more energy for a few days after the previous treatment. Each client reported making diet and exercise changes. Improvement in heart rate scores and symptoms of FM were dramatically reduced in all cases during the study. At the end of the study, four of the five would not statistically qualify as having FM according to the WPI scores. My hypothesis is that it is essential to manage fascial health to reduce the widespread pain symptoms of FM. The results of this pilot study support my hypothesis.

Discussion

In reviewing the literature, I did not find a source that directly correlates FM and managing fascial health. However, I did find sources that studied trigger point (TrP) therapy and myofascial release for individuals with FM.

As tender points are often used as a FM diagnostic criterion, trigger point therapy is often considered as a potential FM treatment by the layperson. A trigger point therapy study was noted by Dr. Liptan (2013) and by Devin J. Starlanyl and Mary Ellen Copeland in their book *Fibromyalgia and Chronic Pain: A survival guide* (Copeland, 2001). Neither of these studies found clinically significant improvement in the symptoms of FM. Another study (Ge et al, 2011) found that mechanical stimulation of active trigger points replicated the overall pain pattern of FM, but another set of researches (Bennett & Goldenberg, 2011) noted the unreliability of trigger point identification and treatment.

Dr. Ginerva Liptan compared myofascial release and Swedish techniques. "The primary research question asked by this study was whether a manual therapy that addresses the fascia is more helpful than one that focuses on muscle relaxation for reducing symptoms of FM" (Liptan, 2013, p. 368). The study

Figure 5: Study participants' blood pressure readings.

Client	Age	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Results
1	73	130/86	Sick	126/78	132/92	148/98	128/88	Pre-High BP
2	35	122/74	126/102	124/96	126/86	126/82	126/84	Pre-High BP
3	45	122/84	124/82	116/82	Sick	126/82	124/74	Pre-High BP
4	59	120/80	122/82	124/98	Sick	126/92	126/92	Pre-High BP
5	18	126/98	Sick	Sick	124/96	Sick	126/96	Pre-High BP

of eight subjects who received myofascial release and four who received Swedish massage resulted in no clinically significant changes. Since myofascial release does not address the interrelationship of the fascial connections, specifically the long chains, myofascial release will not, I believe, offer long-term changes. In contrast, structural integration (SI) focuses on the relationship between the parts and the systems of the body. SI invites the client's body into balance, optimizing the body's ability to be in homeostasis and operate with maximum vitality. This offers the potential for long-term change.

In her discussion of the above study, Dr. Liptan stated:

The current study extends the Swedish and MFR studies in the extant literature by comparing two active manual therapies head-to-head in a parallel design. This is a critical next step on a path toward maximizing treatment efficacy of specific massage therapies and individualizing therapeutic techniques to specific patient profiles. As the current study was parallel in design, it is less likely that Hawthorne, placebo effect, or therapeutic relationship influenced the data. The placebo response is a biologically active process known to reduce pain and often encouraged in clinical practice (Watson et al., 2012). However, it may confound the mechanism of action of therapies when studies do not compare two active modalities in a parallel fashion.

(Liptan, 2013, p. 368)

My study did not compare SI to a parallel modality. However, as a pilot study, it does demonstrate that my protocol, including structural integration, has the possibility of being effective for individuals with FM. Additional research could be done to compare structural integration to another modality within the protocol.

Another concern that may arise is that my study had a small sample size with only five participants. Dr. Amit Goswami points out in his book *The Quantum Doctor* that double-blind, evidence-based trials that are common in allopathic medicine are not applicable to alternative therapies which are based on an individualized approach (2004). Additionally, the goal is to have long-term benefits in which "healing consists of healing the physical body, but also involves the healing of the nonphysical energy body (vital body), mental body, and so on. Obviously, measurement criteria for these nonphysical bodies have to be different" (Goswami, 2004, p. 258).

One of the major finding of this pilot study was that the WPI score decreased for all participants. Four of the clients' WPI scores were low enough to suggest that they no longer met this diagnostic criterion for fibromyalgia at the end of the study period.

This more holistic view of the body assumes that our connection to the divine (supramental) influences our thoughts and mind, which influences our energetic body, eventually arising in the physical body, a process called *downward causation*. "When mind creates the disease, sometimes the healing cannot be found at the level of the mind. One has to take a quantum leap to the supramental for healing" (Goswami, 2004, p. 50). I compare this to rewiring the neurons in neuroplasticity, but also consider a more expansive context at a quantum level of consciousness, i.e., a reality that was previously outside the individual's consciousness is introduced through a creative leap, an "aha" moment. As previously stated, childhood trauma does seem to be a strong factor in the emergence of FM in adulthood. In SI sessions, the recognition of childhood trauma is sometimes brought to consciousness allowing the opportunity for healing. For example, while working on a shoulder of client who had FM, she remembered being pushed off a roof and landing on the shoulder. The client processed how this felt, and was then able to make the connections to her current pain, which then lessened.

To allow for change at the quantum level, it is necessary to have an individualized approach. In this way, as practitioners, we are able to examine the subtle energies that are involved with each client, to allow for subtle differences and adaptations. This is not feasible in a large group, double-blind experiment where each client is only seen for a few minutes. In fact, the amount of time spent with each client averaged over 15 hours in this study. It is through the art of listening, palpation, and empathy that a structural integrator is able to enter into nonlocality, a concept in quantum healing: from cosmic consciousness we have the potential to choose healing.

I assert that the participants will need to continue to manage their symptoms of FM with the protocol I designed in order to continue their reduction in symptoms. Based on my experience, I do not believe they are cured of the disease. Instead, they can mitigate the effects of FM by managing their stress levels and following a healthy lifestyle. All clients stated that they feared the return of widespread pain. I emphasized the importance of following the protocol to manage their symptoms, including continued structural integration for maintenance to address ongoing structural imbalances. Since my practice focuses primarily on chronic pain, I chose to not send the clients off without follow-up. I think it is important to support the emotional as well as the physical aspects of chronic pain.

I spoke with one of the participants in December, seven months after the pilot study, and she reported that she was not in pain and that she continued to receive touch therapy, maintain her diet, exercise, and work on the psychological component of her pain. I would concur with the client: Managing one's lifestyle becomes a critical component in healing from FM. After the pilot study, the client was able to fully embrace the tools she had to manage FM and stay out of pain.

The participants in this study experienced positive results in managing widespread pain of FM by following the protocol. The participants reported better quality of life due to less pain. The integrative medicine approach that included structural integration to target fascial imbalances had positive outcomes. Each participant stated that she looked forward to treatment and felt understood, not judged. The opposite was the case for the clients when they went to allopathic doctors. They reported feeling stressed, not understood, and even judged as being "crazy." It is unfortunate that clients with FM encounter this barrier to receiving treatment for a disease that clearly impacts them on a daily basis. As we educate more practitioners to understand FM, I hope that more clients will be able to receive the help they need to heal.

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