

Fibromyalgia: The Physiological and Psychological Parameters

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December 15, 2010

A year ago, I was just a woman experiencing severe pain throughout her body, headaches and problems sleeping. I didn't have a clue as to what was causing the constant flu-like symptoms I was feeling, and then I learned it was all due to Fibromyalgia. Fibromyalgia's definition is widely recognized as an illness that causes chronic wide-spread pain and fatigue and is usually accompanied by a number of other symptoms and/or complications. There is no easy way of coping with this condition—yet I've found that there is indeed an array of helpful sources and alternatives to consider before deciding that there is nothing we can do to live the quality of life we deserve. Being aware of this has never made me more eager to take this opportunity to expand my knowledge and understanding of Fibromyalgia. I've engaged in active research and even formulated a questionnaire for other patients with Fibromyalgia. My goal is to not only approach Fibromyalgia from various angles, but to embrace it in everyday life through different alternatives. My aim is to understand the physiological as well as psychological effects of Fibromyalgia.

One of the main things I've discovered along the way is that the healing of Fibromyalgia requires a tremendous amount of self-discipline, dedication and patience. Without these principles, there isn't much that anyone could accomplish even if they have all the available resources at their fingertips. When taking into account all the physical pain a person with Fibromyalgia is subdued to, it is no wonder that many find it quite difficult adhering to the physical activities that in fact help relieve its symptoms. I realize that it is essential to keep in mind that maintaining a positive attitude makes it possible to better manage the disorder. So what are the symptoms of Fibromyalgia?

Although it is considered a controversial diagnosis due to lacking scientific consensus to its cause, experts have been able to identify the following symptoms:

- Chronic muscle pain and tender points throughout the body (some patients experience joint pain as well)
- Debilitating fatigue
- Sleep disturbance
- Joint stiffness
- Cognitive (memory, attention, perception, coordination) dysfunction
- It is associated with depression, anxiety and stress-related disorders

Before becoming fully aware of both the physiological and psychological effects of Fibromyalgia, I felt more inclined to learn about the psychological aspects of the condition rather than the physical ones. It wasn't until my research, that I discovered the strong correlation between the physical well-being to that of the psychological (emotional) well-being. I found myself questioning whether there is such thing as the mind being capable of completely or somewhat affecting bodily feelings. What factors are associated with the development of Fibromyalgia? What methods would work best for those living with Fibromyalgia?

New research has found that certain types of exercises, when performed regularly have provided patients with dramatic relief. I've taken small steps to determine the

effectiveness of these exercises by slowly engaging in some of them. I am currently in the process of figuring out what works best for me and hope to examine my own experience as well as that of other patients who have tried similar alternatives. Since there is no immediate way of attacking and ridding the body of the chronic pain caused by Fibromyalgia, and because we are likely to make mistakes as we experiment with a number of techniques before finding what truly works and what doesn't, we must not lose focus in the things we want to achieve. One way I felt I was able to do this was by applying some of the literary works of talented writers who have allowed me to find an artistic as well as scientific connection to my condition. George Eliot, a writer from the 1800's and author of "*Middlemarch*" once wrote "among all forms of mistake, prophecy [was] the most gratuitous" (p.84).

### **Exercising and Eating a Healthy Diet without the Use of Medication**

A growing number of studies have proven that exercise, eating a healthy diet, and some support systems have been successful in treating and improving the overall symptoms of Fibromyalgia. I was glad to learn that a significant amount of relief comes from the things that most of us do everyday. Activities such as: walking, running, jogging, sitting and standing, riding a bicycle, posture manners, carrying groceries or a baby, playing with children, and walking up and down the stairs provide some relief. From the moment I was diagnosed with Fibromyalgia, I was told to take pain medication for my pain. Though a bit hesitant I decided to give it a try, and soon enough realized that this wasn't the best option for me. I'd wake up feeling groggy with lack of energy, even drowsy at times. The following Exercises/Therapies have helped many Fibromyalgia patients gain the most out of life: Running, Jogging, Cycling, Water Aerobics, Swimming, Tai Chi, Yoga, Massages, Stretching and Meditation. While overall aerobic activities increase pulse and respiratory rates, some of which include: walking, running, cycling and swimming, water aerobics appears to add more value to exercise routines as it helps the joints and muscles while increasing resistance and support for the body. Water aerobics promotes balance, reduces pain and provides relaxation. Tai Chi, Yoga, Meditation, Massages and Stretching focus on the physical as well as spiritual stamina of individuals. Tai Chi is a slow meditative martial art (which appeals the most to me) characterized by slow and continuous movements without any straining through a series of contrasting movements. Tai Chi's purpose is "to achieve health and tranquility through movement while developing the mind and body [there is also] effortless breathing designed to build chi (vital life energy), rhythmic movement, and equilibrium of body weight" (Exercise, 2008). Water exercises such as Watsu, is both a water therapy and a stretching exercise. It is "a sort of Shiatsu massage in the water, a sequence of gentle movements and stretches as you are held in warm water that relaxes your body" (Exercise, 2008). Watsu increases flexibility while allowing you to stretch and move your body with greater freedom. Water exercises altogether help free the spine from pressure and pain while soothing the mind. Stretching could be done while doing Yoga or Tai Chi as well as other ways by focusing on muscle groups in the body. Most Fibromyalgia patients report having the most pain in their upper body and certain stretching exercises help build muscle strength of the shoulders and arms. Kick training is recommended for muscle strength of the hips, thighs and buttocks. Eliminating certain foods from their diet

is another way that many Fibromyalgia patients have noted remarkable improvement in their symptoms. According to a health article about foods that are good for people with Fibromyalgia, a survey showed that “42% reported that certain foods made their pain and stiffness worse...experts believe that oversensitive nerve cells in the spinal cord and brain may be involved in the way fibro patients process pain...certain foods may trigger the release of neurotransmitters that heighten this sensitivity” (Betsch, M., n.d.). Many fibromyalgia patients tend to suffer from Irritable Bowel Syndrome (IBS), therefore some foods can irritate the bowel and trigger body pain and other symptoms. Some foods that are not recommended as part of our diet and should be either eliminated or consumed as minimally as possible are: foods with preservatives and additives, caffeine (which can create sleep imbalances), certain variations of veggies “nightshade variety” (tomatoes, potatoes, and eggplants), consumption of yeast (contribute to gluten sensitivities), cow dairy products, carbohydrates, and artificial sweeteners (excitotoxins that activate sensitivity to pain, sorbitol and xylitol that trigger IBS). Organic foods, low-calorie veggies, omega-3 fatty acids and vegan diets as well as plenty of water and restful sleep have helped tremendously in shaping the lives of fibromyalgia patients seeking a healthier diet.

A talented poet, Walt Whitman, whose work is found in a book named “Proust was a Neuroscientist,” inspired me to think about the body’s and mind’s connection to one another. His theory of bodily feelings consisted of using his body to investigate his very own self. In one of the chapters, *The Substance of Feeling*, the words in Whitman’s poetry was recognized as those that “spoke the truth” (Lehrer, J., 2007). The chapter further stated that “Whitman’s poetry revealed an essential truth: our feelings emerge from the interactions of the brain *and* the body, not from any single place in either one” (Lehrer, J., 2007). With Whitman’s theory in that the body was the source of feelings, I was able to think of the body and the mind as though they were one—that their functions weren’t separate, but rather interconnected working hand in hand to generate the physical and psychological feelings we experience.

### **Medication Combined with Other Therapies (e.g. exercise, massage, diet, etc.)**

It takes more than one alternative to alleviate Fibromyalgia symptoms for most patients. What happens when it takes more than natural, non-pharmacological approaches to get the most out of life? Some patients find that they are able to achieve a better balance when taking pain medicine while engaging in exercising, diet changes and other activities to relieve symptoms of Fibromyalgia. Most commonly, patients who are unable to tolerate the greater pain they get from exercising and believe that certain activities trigger their pain; decide to combine medication with physical activities. Clearly, no individual has the same tolerance for things that others do or could move at the exact same pace that others do, therefore, we get to choose what method works best for each and every one of us.

## Medication Alone with No Other Therapies

While studies have shown that countless Fibromyalgia patients have turned to medication for their pain, the same questions always remain. How effective is the medication? What are the side effects? An article based on updates on fibromyalgia medication discussed some of the most successful types of medication and studies that are available. It stated “much progress has been made in identifying effective medication treatments for patients with FM....two recent types of medications have shown promise: the SNRIs duloxetine and milnacipran, and the anti-seizure drugs gabapentin and pregabalin. All these medications reduced pain, the primary symptom of FM, and some other aspects of the condition” (National, n.d.). SNRIs are “drugs that increase levels of serotonin and norepinephrine in the brain” (National, n.d.). One common SNRI is known as Cymbalta, one of the approved drugs currently available on the market for the relief of Fibromyalgia pain. Cymbalta is an antidepressant that helps treat the physical pain due to depression and other cognitive related issues. Milnacipran is another antidepressant that also increases levels of serotonin and norepinephrine in the brain. It has been approved for treatment of depression and pain in Europe and Asia, but has not been made available in the U.S. An anti-seizure drug commonly known as Lyrica has also been used for the treatment of fibromyalgia pain as well as anxiety. I’ve personally experienced the side effects of its use, in addition to grogginess and lack of energy; I noted increased morning stiffness, prolonged drowsiness and fatigue. Pregabalin is another anti-seizure medication also used for fibromyalgia. Studies showed that some patients tolerated this medication well with a few experiencing its common side effects, which were dizziness and sleepiness associated with higher doses. Other side effects of Pregabalin were “abnormal thinking, euphoria, dry mouth, swelling of the legs, and weight gain” (National, n.d.). While there are different types of pharmacological alternatives available to us, it is imperative to keep in mind that with any form of treatment (physical and psychological) precaution should be taken. It is helpful to consider the benefits as well as the possibilities of harmful side effects involved, especially while more and more studies are still being made on newly developed drugs.

## Mistakes that Fibromyalgia Patients Make

I wanted to take a moment to reflect on some of the mistakes many fibromyalgia patients have made. It takes full awareness and understanding of the things that we have or have not done in order to move forward. To begin, an article “13 Mistakes Fibromyalgia Patients Make” brought up some relevant points pertaining to my attitude towards taking medication for pain. One thing I’ve never wanted was to confine myself to the use of medication. Many Fibromyalgia patients “...expect too much from medication, these drugs may or may not work for you....they can also be expensive or may have side effects” (Gardner, A., n.d.). Common mistakes include:

- Refusing to consider off-label drugs
- Not Exploring Alternatives
- Not Keeping a Pain Diary
- Sticking with the Wrong Doctor

- Denying that You're Sick
- Not Enlisting Family Support
- Not Reaching Out to Others
- Not Talking About It
- Feeling Guilty
- Letting Fibromyalgia Get to You
- Taking Life Too Seriously
- Not Moving Because It Hurts Too Much

Just as there are people who seek to improve their symptoms, there are those who don't feel motivated to try new things. It would be ideal to keep a pain diary to keep track of the pain and other symptoms. Once you notice that things are better, you'll be able to figure out what made them better and what to do next time. Some doctors might not take the time to listen carefully to what you have to say and only provide you with limited options and of course, a prescription. Eliot (1994) inferred that while there are some doctors who perceive the art of practicing medicine only as one that creates monetary benefits (e.g. prescribing medicine); there are those who have faith in their patients and the determination to heal their patients through faith alone. Support systems like having family and friends around to talk to and share quality time with, have made my life much more fulfilling. Some people have even gained support from web-based community group forums. One thing I try to avoid is surrendering to my symptoms. It is imperative to focus on finding joyous activities and for me, there's nothing more I enjoy more than playing and spending time with my children. Lastly, I am not afraid to challenge my body; I know that even when I feel some pain once I engage in daily exercising, I am only doing what everyone should be trying to do and that is "move."

### **Serotonin, Dopamine, Norepinephrine, Vitamins and Minerals**

Some pre-existing health issues can also be corrected with exercising, proper diet management and vitamin intake. Certain common health issues are either a result of poor diet, lack of exercise as well as insufficient or inadequate nutritional supplementation, which in fact contribute to or worsen Fibromyalgia symptoms. In addition to Fibromyalgia, I am slightly anemic, have poor blood circulation and above all, a weakened immune system. A scientific example drawing to a relevant connection between fluctuating Serotonin levels in the brain and its effect on Fibromyalgia-related symptoms, also led to an even more interesting discovery—abnormal Serotonin levels indeed affect the immune system. Lehrer (2007) introduced Eliot's chapter *The Biology of Freedom* in which she observed the brain and its neurons as scientific discovery determined that the lack of Serotonin wasn't the actual cause of depression in people. This initiated my interest in exploring the psychological and physiological factors of Fibromyalgia. "Serotonin is a neurotransmitter involved in multiple functions including regulating sleep cycles, influencing mood, learning, pain perception and the immune system" (The Fibromyalgia, n.d.). Serotonin works together with Melatonin to promote a normal sleep cycle. "Melatonin helps you fall asleep, while Serotonin helps you wake up feeling refreshed" (Dellwo, A., 2010a). Research has associated low levels of Serotonin with Fibromyalgia patients. In Fibromyalgia patients, the metabolic regulation of deep or

therapeutic sleep patterns gets disrupted, resulting in sleep disturbances and immune system dysfunction due to Serotonin's role in the "activation of natural killer cells." Another interesting fact about Serotonin is that women, when compared to men "have a lower capacity to produce Serotonin" (The Fibromyalgia, n.d.). This accounts for the reason why 90% of Fibromyalgia patients are females. Serotonin plays a significant role in many physical and psychological symptoms of Fibromyalgia. These symptoms include: "fatigue in spite of adequate rest, changes in appetite, hot flashes and temperature changes, headaches, changes in libido, mood disturbances, depression and irritability" (Dellwo, A., 2010a). Things we can do to regulate Serotonin levels are: "... [exposure to] sunlight, certain carbohydrate foods, some hormones, and exercise" (The Mystic, n.d.). Whereas negative factors include: "menstrual cycle, mood swings, menopause or birth of a child" (The Mystic, n.d.). Another neurotransmitter and hormone is known as Norepinephrine (NE). This neurotransmitter is "similar to adrenaline and many experts believe it helps determine your basic levels of stimulation and arousal... [it] is linked to anxiety and depression...high levels are associated with feelings of joy, and sometimes euphoria" (Dellwo, A., 2010b). Symptoms of abnormal NE levels include: "loss of alertness, memory problems, depression, lack of arousal and interest, worry, anxiety, irritability and jumpiness, fears of crowds and confined places, impaired concentration, restless sleep, and muscle tension or cramps" (Dellwo, A., 2010b). It may also have an impact on the quality of sleep that we get, how we exercise and meet our goals, how we experience love and aggression. Another important neurotransmitter that plays a role in Fibromyalgia symptoms is Dopamine. Dopamine's role in your brain involves thinking (focus) and movement (how the body moves). Like with Serotonin, Fibromyalgia patients also have low levels of Dopamine. Abnormal levels of Dopamine are associated with the following symptoms: "stiff, rigid, achy muscles, tremors, impaired fine motor skills, cognitive impairment, inability to focus attention, poor balance and coordination, strange walking patterns" (Dellwo, A., 2010c). Certain foods as well as stimulant therapy are recommended to regulate Dopamine levels in the brain. Besides Serotonin, there is another important regulating factor which affects the immune system's function. Sometimes exercise, eating a healthy diet and getting good sleep isn't enough, the body contains a mineral which is found in 31% of our muscle cells and the rest in our bones and other tissues. This mineral is known as Magnesium. According to studies, patients with Fibromyalgia have a low total body magnesium level. Magnesium deficiency contributes to the causes of the symptoms that Fibromyalgia patients experience and involves the skeletal muscles, smooth muscles, central nervous and cardiovascular systems. "Magnesium deficiency causes a disruption of our source of energy...[and also] plays an important role in the immune system...is implicated in increased production of free radicals that place even more stress on our immune system" (The Fibromyalgia, n.d.). Vitamins are also very essential in promoting the body's healing from Fibromyalgia and even in people that don't suffer from this condition. Without the necessary nutrients our diet wouldn't be balanced. "While vitamins are derived from organic (living) sources, minerals are derived from non-organic (non-living) sources...we need on the average of 500 grams of carbohydrate, proteins and fats...about 1.5 grams of minerals" (The Fibromyalgia, n.d.). Finally, there are essential fatty acids (EFAs) that also play a significant role in having a healthy immune system by building and maintaining the necessary blocks pertaining to "particular components of our

immune system such as: macrophages, lymphocytes, natural killer cells, immune system messengers, and production of antibodies...foods high in EFAs are mackerel, salmon, herring, bluefish and sardines” (The Fibromyalgia, n.d.).

### **Pregnancy, Aging, and Menopause**

For many women, Fibromyalgia is only one of other health concerns. Some Pre-existing health conditions may contribute to Fibromyalgia symptoms. Besides from a weakened Immune System, Anemia, and IBS, other health conditions such as: Diabetes, Menopause, and High Blood Pressure play a significant role as well. An article, “Is Menopause Making Your Fibromyalgia Worse?” indicated that menopause may worsen Fibromyalgia symptoms in some women. It focused on a study that compared perimenopausal women with significant symptoms (symptomatic) to those with milder symptoms (controls). “The sleep in symptomatic women may not feel as refreshing or restorative as it used to be because this group of women has less parasympathetic nervous system activity during sleep” (Fibromyalgia, 2010). This therefore, resulted in more sleepiness and less “deep-level” sleep in the symptomatic compared to the controls. An extensive study which consisted of post-menopausal women who had little to no estrogen levels, revealed the correlation between hormone deficiency and the quality of sleep they receive. Due to the lack of growth hormone, the amount of sleep can be impacted depending on the deep-level (stage 3 and stage 4) of sleep. These stages of sleep stimulate the release of growth hormone needed for the repairing of tissues. Human Growth Hormone (HGH) as defined by “Human Growth Hormone: Physiological Functions and Ergogenic Efficacy,” is “a pea-sized structure at the base of the brain... [that] fuels childhood growth and help maintain tissues and organs throughout life” (MayoClinic, 2009). HGH may also serve as the key to slowing the aging process. As people begin to age, the natural course of growth hormone slows down as a result of the limited amount of hormones that the pituitary gland is able to produce. This has therefore, prompted the use of synthetic HGH to treat individuals with hormone deficiency. HGH in a synthetic form must be injected and it is usually a prescribed medication. Some noted changes take place in our bodies as aging occurs—our bones become more fragile (less flexible), we become more susceptible to injuries and illnesses, and lose strength and muscle mass. In individuals with hormone deficiency, HGH can help “increase bone density, increase muscle mass, decrease body fat, and increase exercise capacity” (MayoClinic, 2009). For those who are otherwise younger and/or healthy, taking HGH won’t guarantee the same benefits to those who are hormone deficient. “Although it appears that HGH injections can increase muscle mass and reduce the amount of body fat in healthy older adults, the increase in muscle doesn’t translate into increased strength...in fact, researchers have found that strength training is a cheaper, more effective way to increase muscle mass and strength” (MayoClinic, 2009). These injections may be a costly way of improving the effects of hormone deficiency and I would suggest trying a strength training program first to help build lean muscle mass naturally. I strongly believe that women with or without hormone deficiency, regardless of age could benefit from a rather affordable, less complicated way of gaining the strength and stability that they need. “The physiological role of HGH is to increase protein synthesis and mobilize fatty acids for use as an energy substrate... [it’s] been

proven to increase muscle mass and strength in adults with little or no HGH” (Stone, M.H., 1995). The intensity and duration of exercising, aerobic and anaerobic exercises, and weight training exercises result in the increase of HGH levels post exercise. Fibromyalgia symptoms are also thought to be signs of pregnancy among pregnant women. This may be due to the hormone fluctuations that occur with pregnancy as well as weight gain. Could these changes be the result of Fibromyalgia instead of pregnancy in some women? Is this another reason why Fibromyalgia is often misdiagnosed, because of similarities among the symptoms? Studies have revealed that “women with Fibromyalgia have had more symptoms of body pain during pregnancy than women who did not have Fibromyalgia” (The Mystic, n.d.). Whether a woman is pregnant or not, both physical and emotional stress can cause symptoms to flare. Besides from hormone changes, pregnancy also involves weight gain which ultimately gets the body out of balance, the mental and emotional distress that comes with preparing for the baby’s arrival, and even after giving birth.

### **Exercise**

Certain types of exercises, specifically strength training has been found to reduce the intensity of Fibromyalgia symptoms. In strength training, one could use their muscles to lift extra pounds and gradually increase the amounts of weight to develop strength and stamina. It is essential to keep in mind that when designing one’s own strength training program, one “should not focus on ‘pushing the limits’ but rather on breaking the pain cycle and increasing functional activity levels...therefore, light-to-moderate intensity activity is most appropriate” (Dawes, J., 2002). Since no fibromyalgia patient may respond to the intensity of strength training the same way, “exercise...should be based on the client’s symptoms, fitness level, pain tolerance, and individual goals” (Dawes, J., 2002). Some people may respond better to exercise sessions that are divided into smaller, spaced out sessions throughout the day, rather than 1 long session. Also, performing stretching exercises sporadically throughout the training session can help increase one’s tolerance as well as serve as an opportunity for resting between exercises and allowing muscles to recuperate.

### **Types of Strength Training Exercises**

Given the differences in physical and psychological responses to pain resistance when engaging in heavy weight and strength training exercises, I’ve considered the importance of remaining consistent all throughout, no matter how difficult or painful any form of physical activity feels to you. “Lack of activity destroys the good condition of every human being, while movement and methodical physical exercise save it and preserve it” –Plato (Quotations, 2010). Although, anyone could generally adapt to a wide range of exercises, patients who are beginning a new exercise program could try:



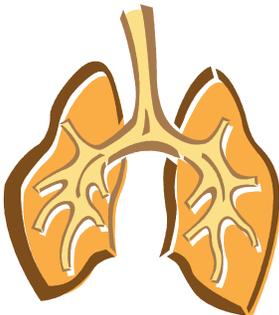
Stretching before, in between, and after exercises (try to hold stretches for at least 10 seconds)



Lifting small amount of weights: try to vary between sets and repetitions for each exercise according to how much you can handle. Gradually increase repetitions and frequency.



When lifting weights, avoid using weights or machines that you have to grip tightly (this could put strain on your muscles)



Inhale and Exhale to keep your oxygen and blood circulation flowing



Take very small breaks in between exercises



Try to exercise 20-25 minutes once a day for 3-4 times during the week, then gradually increase frequency to 20-25 minutes twice a day for 2-3 days during the week



Drink Plenty of Water!

Those who already engage in exercising, are pregnant or aging could truly benefit from a strength training program when combined with Aerobics. Some specific strength and stretching exercises I would recommend are: “standing hamstring stretch, forearm stretch, butt and back stretch, groin stretch, exercise ball, ball crunches, air bike, barbell and dumbbell curls, elastic band bicep curls, exercise ball hamstring curls, squats, leg press, lunges, step ups, and machine bench press (vertical press)” (MyFit.ca Health, 2010).

### **Other Relaxation Methods**

So we’ve learned that therapies such as: meditation, Tai Chi, Yoga, Watsu, aerobics and water aerobics, and massages help patients achieve great levels of tranquility and help keep the patients’ mind away from the pain. Music and Dance Therapy may be other helpful options to consider when seeking pain relief and stamina. “Music therapy is an established form of treatment that can be a valuable resource in restoring quality of life for fibromyalgia patients. Studies show that music therapy alleviates pain, promotes physical rehabilitation, can create a feeling of wellbeing, and aids in managing stress” (Fibromyalgia-Symptoms, 2008). Treatment plans may include: singing, listening, composing, and moving to music. An interesting aspect of this form of healing is that the idea of using music therapy was derived from the writings of Aristotle

and Plato. This pain management approach doesn't always require a patient to be musical in order to benefit from it. There are different versions of music that are best suitable for individuals and are referred to as "prescriptive music," or "music that consists of 50-60 beats per minute." "The type of music to be used in therapy is determined by the board certified music therapist" (Fibromyalgia-Symptoms, 2008). Music therapy is able to lower blood pressure as well. Dance programs include regular dance classes that help reduce stress, improve muscle strength, posture, and flexibility and boosts self-esteem. They also help one focus on important factors such as self-expression, staying motivated, and setting realistic expectations for one self. It has been effective in treating psychological-related symptoms of fibromyalgia such as: "fibrofog" (memory/cognitive disruption), anxiety, tension, chronic pain, stress and depression. Physical benefits include: healthy circulatory, respiratory, and muscular and skeletal systems. Physical benefits of dancing may also result in the production of endorphins, "a hormone that stimulates a sense of well-being" (Fibromyalgia Syndrome, 2008). These forms of therapy may also help patients cope with the psychological effects of fibromyalgia and those that have been brought-on as a result of intense physical activities such as exercising. Aristotle once wrote: "It is clear, then, that wisdom is knowledge having to do with certain principles and causes. But now, since it is this knowledge that we are seeking, we must consider the following point: of what kind of principles and of what kind of causes is wisdom the knowledge?" (Inspirational Quotations, 2010). Aristotle's words should remind us of the importance of applying ourselves every step of the way. We are the ones who could set the boundaries that may impede us from inventing our own suitable program to combat fibromyalgia.

### **Observations of Other Fibromyalgia Patients**

In my attempt to learn from other Fibromyalgia patients, I produced a Patient Questionnaire listing the most general questions I could think of. The questionnaire was distributed to 5 women. The following are the questions followed by their responses:

#### Questionnaire Response for Woman #1:

- Age: 50
- Gender: Female
- Ethnicity: Caucasian
- Occupation: Bank Manager
- When you were first diagnosed with Fibromyalgia? 8 years ago.
- How long were you experiencing its symptoms before you were diagnosed? For 2 years I had been experiencing chronic body pain, fatigue, headaches, and difficulty completing physical tasks and flexibility.
- What physical approaches/alternatives have you practiced? Considered? I regularly talk to friends, play chess and bingo, kayak, meditate and write. I'm also careful with what I eat because I'm diabetic too.
- How do you cope with stress/emotions as a result of Fibromyalgia? All of my regular, daily activities have helped me cope with stress and emotions.
- Are you currently taking any medication for pain? If yes, how effective is it?

No. I did 2 years ago, but had to stop because I didn't notice any improvement and I hated the way I would feel when waking up in the mornings.

- Are you satisfied with the medical treatment you're receiving? Sometimes.
- Is there anything about living with Fibromyalgia that you would like to address further? I would probably tell anyone else to try out a pain medication to see if it works, but I would rather focus on more physical activities. It is often so hard for me to move around as much because I'm in constant pain. All I want is to find more things to do to keep myself from hurting all the time.

\*\*Thank you for your time and participation. Best Wishes for a Happy and Healthy Life!

Questionnaire Response for Woman #2:

- Age: 44
- Gender: Female
- Ethnicity: African American
- Occupation: Yoga Instructor
- When you were first diagnosed with Fibromyalgia? 5 years ago.
- How long were you experiencing its symptoms before you were diagnosed? Over 1 year. I became so frustrated with all the pain at first that I appreciated exercising and being physically fit even more. I've always been an active person and I'd experienced similar symptoms after long days of hard work and moving around all the time. I had no idea I would end up with Fibromyalgia.
- What physical approaches/alternatives have you practiced? Considered? After I was diagnosed, I tried Yoga and felt much better after 7 months of trying it. I also do Tai Chi 3 times a week, jog, ride a bike, and meditate, breathing exercises to relieve anxiety, stone and oil massages. I also spend time with friends, avoid caffeine and take Lyrica for pain.
- How do you cope with stress/emotions as a result of Fibromyalgia? Therapeutic massages and breathing exercises help a lot with stress. My friends give me emotional support.
- Are you currently taking any medication for pain? If yes, how effective is it? Yes, Lyrica. It works great.
- Are you satisfied with the medical treatment you're receiving? Yes.
- Is there anything about living with Fibromyalgia that you would like to address further? No.

\*\*Thank you for your time and participation. Best Wishes for a Happy and Healthy Life!

Questionnaire Response for Woman #3:

- Age: 25
- Gender: Female
- Ethnicity: Caucasian

- Occupation: Receptionist
- When you were first diagnosed with Fibromyalgia? 3 years ago.
- How long were you experiencing its symptoms before you were diagnosed?  
For 1 year I couldn't sleep well, couldn't concentrate, aching all over my body and headaches. It was hard to fall asleep and when I did I couldn't go into a deep sleep as I normally would in the past.
- What physical approaches/alternatives have you practiced? Considered?  
I run everyday, do some swimming and play tennis.
- How do you cope with stress/emotions as a result of Fibromyalgia?  
I shop and get weekly massages. These really make me feel better and they get my mind off stress and problems.
- Are you currently taking any medication for pain? If yes, how effective is it?  
No. I stopped taking Cymbalta 6 months ago because I was experiencing depression and anxiety symptoms that I never had before. I didn't feel like myself.
- Are you satisfied with the medical treatment you're receiving? Yes, somewhat.
- Is there anything about living with Fibromyalgia that you would like to address further? I would like to get more information about other things I can do to feel less pain. I haven't been enjoying the things I used to and don't feel a connection to my friends and family anymore. I want to fix this situation and I think if I could understand Fibromyalgia better, it would help.

\*\*Thank you for your time and participation. Best Wishes for a Happy and Healthy Life!

#### Questionnaire Response for Woman #4:

- Age: 29
- Gender: Female (Pregnant)
- Ethnicity: Hispanic
- Occupation: Sales Representative
- When were you first diagnosed with Fibromyalgia? 6 years ago
- How long were you experiencing its symptoms before you were diagnosed? For 2 years I experienced symptoms of irritable bowel syndrome (IBS), headaches, difficulty with what I wanted to say, muscle pains, and trouble sleeping. All of these symptoms seem to have gotten worse since I became pregnant.
- What physical approaches/alternatives have you practiced? Considered? I've done some stretching and breathing exercises, try to nap daily for at least 1 hour, and I am currently working towards a semi-vegetarian diet. I also engaged in hiking activities before my pregnancy.
- How do you cope with stress/emotions as a result of Fibromyalgia? I am very close to my family and have 2 wonderful friends who support me all the way. My husband is also very supportive. I also love my career and I feel fulfilled from doing what I enjoy very much, this helps me a lot with my symptoms.
- Are you currently taking any medication for pain? If yes, how effective is it?

I used to take Cymbalta which helped a lot with my pain as well as with helping me sleep, but now that I am pregnant it has become more difficult for me to manage my symptoms with just light exercising.

- Are you satisfied with the medical treatment you're receiving?  
Somewhat.
- Is there anything about living with Fibromyalgia that you would like to address further? Due to the limited options pregnant women with fibromyalgia have, I worry about the ways that I should or shouldn't exercise. I also worry that I cannot take the same medicine that I used to take for pain because it can harm the baby. I would like to learn more about safer ways of dealing with fibromyalgia.

\*\*Thank you for your time and participation. Best Wishes for a Happy and Healthy Life!

Questionnaire Response for Woman #5:

- Age: 48
- Gender: Female
- Ethnicity: Caucasian
- Occupation: Nurse
- When you were first diagnosed with Fibromyalgia? 10 years ago
- How long were you experiencing its symptoms before you were diagnosed? 4 years. I had chronic fatigue, problems falling asleep and staying asleep, trouble with remembering certain things, depression, mood swings, and severe pain all over my body.
- What physical approaches/alternatives have you practiced? Considered?  
I am actively involved in my career, which is quite fast-paced. I run, ride my bicycle, and play with my grandchildren very often.
- How do you cope with stress/emotions as a result of Fibromyalgia?  
I am also going through menopause, so there are many times when I don't know if feeling oversensitive to things have anything to do with my fibromyalgia but I think both may be causing all that I am experiencing. To cope with stress, I enjoy spending time with my grandchildren (5 and 3 years old), my husband, family and friends. I also do some meditation and take lots of warm baths to help me relax.
- Are you currently taking any medication for pain? If yes, how effective is it?  
No.
- Are you satisfied with the medical treatment you're receiving?  
Yes.
- Is there anything about living with Fibromyalgia that you would like to address further? Sometimes I think that both my menopause and fibromyalgia are interconnected and make my symptoms feel worse than they really should be. It is hard to tell if certain symptoms are coming from one as it often resembles the other condition. I think it would help to understand if these are connected in any way and what things I can do to take better charge of my life.

\*\*Thank you for your time and participation. Best Wishes for a Happy and Healthy Life!

Three other women I met at a seminar hosted by a medical practice named “Better Body Solutions,” also shared some of their individual experiences in dealing with Fibromyalgia. The first woman had experienced the common Fibromyalgia symptoms (pain all over the body, muscle stiffness, fatigue, lack of energy, etc.). She underwent several lab testing and saw 3 different doctors (not Rheumatologists) and felt frustrated long enough before she learned it was Fibromyalgia. She claimed that her reason for not seeing a Rheumatologist was because she was afraid of having her suspicions confirmed. This made me think about the denial in which many patients surrender to, before considering alternatives to improve their symptoms. The second woman, a 40 year old married mother of two and a middle school teacher, was diagnosed 3 years ago with symptoms for 5 years before that. She noted that support from family and friends did make a small difference in her life. She also assured me that exercise such as: yoga, acupuncture, jogging in the mornings, swimming, and Pilates have somewhat helped with managing her pain. She has lessened the amount of caffeine consumption as well as avoided foods with preservatives and additives because they seemed to trigger digestive irregularities. The third woman is in her late 30’s, an independent landscaper with an upbeat personality. She has suffered from Fibromyalgia since the age of 28. She regularly sees her Rheumatologist, takes Lyrica for pain relief and doesn’t regularly exercise. She admits that she needs to quit smoking and the most she does for exercise is walk a lot.

One main thing I noticed from all 5 patients was their lack of self-discipline. I found that some have made substantial efforts towards relieving their pain and improving their daily lives. Still, I feel that they could benefit from reevaluating their lifestyle choices. Based on their responses, I get the impression that they are more likely to focus on taking different approaches, including reducing or avoiding pharmacological intake of drugs for pain. I am hoping that they would consider working on a daily routine to maximize and complement the effect of the physical activities they are currently following. As I’ve already discussed, people with Fibromyalgia have an array of options available to them and it’s merely a matter of implementing when and how they will begin taking the course of action that’s needed. For those patients who have trouble falling and remaining asleep, ensuring peace and quiet may only be one of their primary concerns. I would suggest that they try out some of the therapeutic music methods followed by or even during meditation (yoga or Tai Chi) and perhaps a calming hot bath before bedtime could be the solution for some individuals. For patients who are being affected by the psychological effects of Fibromyalgia (e.g. depression, anxiety, cognitive disruption, etc.), perhaps a combination of dance therapy, moderate exercising and combining aerobic with strength training exercises, and also music therapy may be helpful. All patients should really focus on sleep before anything. Sleep is very crucial when it comes to figuring out the best ways to achieving relaxation before bed in order to facilitate good sleep. It is what makes it both physiologically and psychologically possible for us to even function properly. In light of this concept and in light of the sleep studies that have been conducted on Fibromyalgia patients, the following poem has not only inspired me, but has made me think about sleep on a more creative note: (Mabillard, 2009)

Be not afeard: the isle is full of noises,  
Sounds and sweet airs, that give delight, and hurt not.

Sometimes a thousand twangling instruments  
Will hum about mine ears; and sometime voices,  
That, if I then had wak'd after long sleep,  
Will make me sleep again: and then, in dreaming,  
The clouds methought would open and show riches  
Ready to drop upon me; that, when I wak'd  
I cried to dream again –Shakespeare (The Tempest 3.2.96-104)

After reading the poem, my analogy of its words was inclined towards the meaning of what attaining a good night's sleep is all about. It is one of the most desirable indulgences of life itself—reaching a level of ecstasy and peace. To be submerged in such a relaxed state of mind.

While the patients worked on their questionnaires, I took some time to participate in a water aerobic session which consisted of some stretching warm-ups, breathing techniques and slow, steady movements in the water. I will be trying to focus on stretching and water exercises to see how this helps with the morning stiffness I often experience throughout my legs. I've also taken small steps to slowly increase my water intake, replacing skim milk with soy milk, and cutting back on the amount of coffee that I drink. I've even made my work area more “fibromyalgia friendly,” by changing my chair for better back support. This has improved my posture as well.

Exploring the realms of Fibromyalgia has done more than strengthen my knowledge and understanding of Fibromyalgia, it has created a whole new world of possibilities for me. Fibromyalgia as I've come to know it is merely a debilitating condition that impairs your ability to think or even hope, it is a form of art that allows me to choose and find my very own path towards the ideal routine for a better quality of life. I look forward to continuing with my journey as I've began embracing this condition with all its imperfections and flaws. The opportunity to inspire myself and maybe others through new discoveries doesn't end here.

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