

## Fibromyalgia

Fibromyalgia, or Fibromyalgia Syndrome (FMS) is a complicated illness that is not well understood. This paper will define FMS and explore some of the frustrating barriers to proper medical care experienced by those with FMS. Because there is no agreed upon cause, this paper will go over several possible causes. Then, it will go over allopathic treatment, how that treatment works as well as the side affects of those treatments. It will also illustrate how herbalism can be effective in FMS treatment as primary care or as complementary care.

FMS is described in almost all countries of the world and is one of the fastest growing illnesses in the US, between 2-6% of the US population (FMS Network, Staud, Admec). FMS mainly affects women, who make up 80-90% of the patient population. The average age of patients is 20 to 45 years old, however children, men, and elderly can also be affected. While no single personality type is associated with FMS, very ambitious, hard working perfectionists are often seen in the FMS population (Cabrera).

To better understand FMS, it is helpful to define some medical terms. A disease is “an identifiable abnormality of the body that can be verified by testing,” while an illness is a persons experience or “perception of ill health (Salt, Season).” There can be disease without illness, for example cancer with no experience of symptoms. There can be disease and illness, for example cancer with symptoms like pain. There can also be

illness without disease, for example pain with no identifiable disease or cause.

Fibromyalgia is considered an illness without disease because no definite cause is proven to be associated with it. A syndrome is a collection of symptoms that characterize a disease or disorder (American Heritage Dictionary). Fibromyalgia is considered a syndrome, as it is a collection of symptoms.

The major symptoms of FMS are: widespread muscle stiffness and aching, muscle fatigue, tender points (sensitivity to pressure in specific areas), disturbed sleep, fatigue, sensitivity to cold, bruxism (tooth grinding), digestive disturbance, Genitourinary disturbance, sensory overload, “brain fog” or cognitive dysfunction, depression, dry eyes and mouth, headaches, Rhinitis (sinus disturbance), and skin, hair and nail problems (Cabrera, Staud, Adame). These symptoms look different in different people, and can change over time within each individual. For some the fatigue bothers them most, for others the pain, and for others cognitive dysfunction (aka brain fog), etc. People with FMS will describe FMS by saying, “It hurts all over,” or “Everything hurts,” and that they don’t know why (Libman).

It takes an average of 5 years to receive proper diagnosis (FMS network, Cabrera). This is because there are many barriers to proper diagnosis and care. Some barriers include misdiagnosis, sexism and stigma. FMS is both under and over diagnosed. Some doctors don’t consider FMS real and think it is psychosomatic, telling patients that it is all in their head. They might attribute all of the symptoms of FMS to depression, missing an opportunity to give an accurate FMS diagnosis. On the other hand, some doctors use a FMS diagnosis as a blanket diagnosis for things they can’t easily classify. They may also attribute the FMS symptoms with another illness that looks similar to

FMS. These are errors of over-diagnosing FMS and missing the underlying pathology that is causing the FMS-like symptoms. For example, Attention deficit disorder/hyperactivity disorder (ADHD) is often misdiagnosed as FMS. When the ADHD is treated, the muscle pain and exhaustion associated with FMS improve dramatically (Cabrera, Staud, Adamec). In fact a person can have both ADHD and FMS. Other illnesses that are often confused with FMS include: chronic fatigue immune dysfunction syndrome (or CFS), Lyme's disease, and many other autoimmune disorders like rheumatoid arthritis or lupus; multiple sclerosis, thyroid disease, restless leg syndrome, irritable bowel syndrome, interstitial cystitis, tension or migraine headaches, myofascial pain syndrome, mitral valve prolapse syndrome, hypoglycemia, closed head injuries, and ADHD (Cabrera, Staud, Adamec). Some of these often coexist. For example, According the CDC, 30 to 70% of patients with CFS also have FMS (Staud, Adamec).

Describing CFS in more detail can help illustrate why the two are often confused. The shared symptoms include: fatigue, muscle pain, brain-fog, impairment of memory and concentration; and headaches. Major differences are that tender points are not seen in CFS, and that usually pain is the primary symptom of FMS, but fatigue is the primary symptom of CFS. Exercise and antidepressant drugs can be helpful for FMS, but not for CFS. According the CDC, 30 to 70% of patients with CFS also have FMS (Staud, Adamec).

Because women make up most of the FMS patient population, addressing sexism in the medical industry is hard to avoid. Exploring this topic thoroughly is beyond the scope of this paper, but shedding some light on it can help those struggling to access

proper care understand the social/political context within which stand. It can show them how real this struggle is and has been throughout history. This can help provide a stronger sense of self-trust, especially important when doctors doubt their experience.

The medical industry has had a powerful role in perpetuating a sexist ideology. Female function has been considered an inherent illness and the female body was seen as the cause of all illness in women. Puberty was seen as a “crisis,” (Ehrreich and English) and monthly menstruation was seen as “periods of ill health,” or “another reason why every woman should look upon herself as an invalid once a month (A Physician’s Counsels to Woman in Health and Disease (1871).” Physicians blamed the ovaries for several conditions considered illnesses, like personality disorders, or most frequently, a strong sex drive. In attempt to correct these illnesses, thousands of ovariectomies were performed between 1860-1890. The clitoris was also attributed to sickness. “Unnatural growth” of the clitoris was thought to lead to death and serious disease. These view points justified amputation. Although the medical industry and our social environment has have changed over time, sediments of these historic ideologies are alive. It is not uncommon for a woman with FMS symptoms to be told by doctors that her symptoms are linked to being a woman. For example, their pain and fatigue is often associated with menstruation and written off, leaving the patient feeling as though her doctor believes being female is a disease (Staud, Adamec). Additionally, the fact that many doctors don’t even believe FMS is real can be linked to the sexist ideology that women are not to be trusted and do not need to be taken seriously.

However, there has been effort made to better diagnose FMS within the medical community. The American College of Rheumatology (ACR) has published two clinical

papers on diagnostic criteria for FMS. The first, published in 1990 required a history of chronic and widespread body pain and the presence of local tenderness at 11 of the 18 specified tender points. Pain is considered widespread when it is found in all four quadrants of the body and when there is axial skeletal pain (in the cervical, thoracic, or lumbar spine, or the anterior chest). The updated document, published in 2010 does not include a tenderness scale, but instead a 42-question symptom questionnaire. Based on the number of symptoms checked and answers given to other diagnostic questions a mathematical formula is used to determine an accurate FMS diagnosis.

There are pros and cons to these diagnostic tools. They help validate the existence of FMS and create something concrete to look for. However, creating a standardized diagnosis excludes people who don't meet all the requirements. Within the framework from 1990, someone could be denied a diagnosis just because they only have 10 of the 18 tender points at the time of examination. As mentioned, FMS pain is not always the same. Replacing the tender point requirement with a more comprehensive questionnaire is an improvement, but still imperfect. Because FMS can be so different for each person affected, it is more helpful to look at each individual as unique, with their own personal experience of FMS, rather than struggle to create a standard. To provide a deeper understanding of how FMS can look for these individuals, it is helpful to describe some of the major symptoms and how they may affect people in more detail.

Chronic deep aching and stiffness in the muscles is often considered the universal symptom of FMS. This is often worse in the morning. The stiffness and pain may calm down as the day progresses, but usually won't completely go away. It may affect any or

all muscle groups, and can migrate from day to day. Often the stiffness is aggravated by strenuous exercise, exposure to cold environments, and stress.

Sleep disturbance is almost always present in cases of FMS. Common problems include: difficulty falling asleep; repeatedly waking up in the night, possibly for an hour or more at a time; waking up early without being able to fall back asleep; and waking up feeling exhausted, even after getting 8-10 hours of sleep. This kind of exhaustion is called chronic fatigue and is another key symptom in FMS. Sleep studies done on folks with FMS show repetitive intrusions of alpha wave (waking) brain patterns into the delta (deepest) sleep phase (Cabrera). This means that while the body is sleeping, it is not able to remain in the delta phase of deep restorative sleep long enough to complete many tasks essential to optimal health. For example, hormones released during delta sleep contribute to the healing of micro-trauma in the muscles. Micro-trauma in the muscles contributes to muscle pain when healing is incomplete.

These sleep problems often create a vicious cycle of symptoms. For example, the pain of FMS can cause insomnia. The insomnia causes lack of sleep. The lack of sleep then causes muscle pain. The pain then contributes to lack of sleep and the cycle repeats. But pain is far from the only problem associated with lack of sleep.

Lack of quality sleep also contributes to “Fibro fog,” depression, fatigue, and more. Fibro fog is also called brain fog or cognitive dysfunction. It is marked by confusion, forgetfulness, and difficulty with attention and concentration. These symptoms are similar to ADHD and dyslexia.

Major clinical signs of depression include: diminished interest or lack of pleasure in almost all daily activities, a depressed mood most of the time for days at a time,

unexplained weight gain or loss with decreased or increased appetite, fatigue or loss of energy, feelings of worthlessness or inappropriate guilt, a diminished ability to think, concentrate or make decisions, insomnia or excessive sleep, recurrent thoughts of death, or recurrent suicidal thoughts (APA).

Depression, like sleep disturbance, is intimately connected to other FMS symptoms, like pain. Pain can dramatically impact a person's life. It can make enjoyable things no longer enjoyable, getting in the way of things that make a person happy, thus contributing to depression and irritability. It can affect relationships and may contribute to loss of jobs or other important relationships further contributing to depression. Chronic pain also contributes to depression by exhausting the body's ability to produce endorphins, which are responsible for pain modulation. Endorphins also have mood elevating effects, which act as natural antidepressants.

Impaired digestive function is another major symptom in FMS. This can look like impaired appetite, indigestion, gas, bloating and alternating constipation and diarrhea, heartburn, or abdominal cramping, gastroesophageal reflux disease (GERD), irritable bowel syndrome (IBS) and high risk for leaky gut syndrome.

GERD is a condition in which food comes partly up the esophagus, instead of going down to the stomach. Because the esophagus lacks the protective layer of mucous found in the stomach, food coming up can be very irritating to the esophagus. Leaky Gut Syndrome is a condition in which improperly digested food or other inappropriate materials enter the bloodstream by passing through a damaged intestinal wall. The symptoms appear much like irritable bowel syndrome (IBS). Both are characterized by episodic or alternating bouts of constipation and diarrhea. Leaky gut can be caused by

partially digested food passing down the intestines and damaging the protective mucus layer of the intestines. If the intestinal wall becomes damaged, materials that once were kept inside may now exit and enter the blood stream.

Unfortunately, there are even more symptoms associated FMS. I will not cover each in detail here. There are several resources to explore if there is further interest. Many are included on the works cited section of this paper. Here I find it more important to take a step back and wonder, “What is going on here? Why is this happening in the first place?”

There are several theories regarding the cause of FMS. None of them are fully agreed upon and there is a lot of controversy about the nature of FMS within the medical community. Some of the theories seem complete but have no causes themselves. Other theories can be seen in people without FMS and lacks an explanation for why some folks wind up with FMS symptoms while others do not. Many of these theories are interconnected with several issues happening at once. Looking at some of these theories, even if they don’t explain everything, can give us a better understanding of what is going on and insight for possible treatments. Some of these theories include: malfunction on a cellular level resulting in a depleted energy source, hypothalamic dysfunction, adrenal exhaustion, nutritional imbalances or deficiencies, stress and physical or emotional trauma, car accidents and whiplash, viral infections, autoimmunity, chemical imbalances within the body, genetics, and so on.

Because stress is major aspect of many of these theories, it is important to understand how stress impacts the body. Looking at the autonomic nervous system and

aspects of the endocrine system will show us how stress changes our physiology and how that affects the body and overall health.

The autonomic nervous system controls involuntary bodily functions. It regulates the functions of glands, smooth muscle tissue, and cardiac muscle (Winston, Maimes). It functions in two distinct systems: the sympathetic nervous system, and the parasympathetic nervous system. The sympathetic nervous system is responsible for dealing with stress and maintaining homeostasis (known as the fight/flight stress response), while the parasympathetic nervous system is responsible for functions that are not a priority during stress (known as the rest/digest state). Ideally the body maintains a balance between these two systems.

The main physiological pathway that manages stress response is called hypothalamic-pituitary-adrenal (HPA) axis. The hypothalamus is the main control center of the brain affecting every nearly every part of our physiology. The pituitary gland is connected to the hypothalamus by a thin stalk. It is sometimes called the “master gland” as it regulates many critical functions (Winston, Maimes). The adrenal glands sit on top of each kidney. The adrenals produce hormones that stimulate the sympathetic nervous system (the stress response).

Through these systems, stress changes our physiology, allowing our bodies to prioritize survival in times of need, like during car accidents, emergencies and other threats to our safety. It begins in the hypothalamus where a stressor stimulates the release of corticotropin- releasing hormone (CRH). CRH stimulates the pituitary to produce adrenocorticotrophic hormone (ACTH, also known as corticotropin). ACTH then stimulates the adrenals to produce stress hormones such as cortisol, epinephrine and

norepinephrine (adrenaline and noradrenaline) and aldosterone. These stress hormones put the body into the sympathetic state, redirecting blood supply to prioritize the limbs, brain, and lungs. This allows someone to run faster, think and react faster, feel less pain and even have more muscular strength. In this state, a person might lift something too heavy for them to lift normally in order to rescue someone injured underneath.

Consequently, there is less blood flow to the digestive, eliminative, and reproductive organs because survival is seen as more important. Daily stressors like school or work deadlines, or tension in a relationship, traffic, etc, can all trigger the sympathetic stress response. Because these stressors can be ongoing, many people exist in a chronic sympathetic stress response state for extended periods of time. This creates many health problems and can be fundamental in FMS. In fact, excessive sympathetic dominance is seen in those with FMS.

Remaining in the “fight/flight” state results impaired function of the digestive issues and a host of other health problems. For example, the sympathetic stress state impairs digestive enzyme production and lowers protective mucus on the intestinal wall. This can cause leaky gut, a syndrome previously mentioned as prevalent in those with FMS. With lack of adequate digestive enzymes, food may not be fully broken down. And with less protective mucus their intestinal wall will be more prone to damage, which allows the undigested food through.

Another consequence of excessive sympathetic stress states is adrenal exhaustion. Adrenal exhaustion is also known as adrenal fatigue. It occurs when the adrenal glands cannot adequately meet the demands of stress. The adrenal glands continue to function but are unable to maintain homeostasis as the output of regulatory hormones has been

diminished. Adrenal fatigue looks almost identical to FMS. Symptoms include: lack of energy, inability to remember things, high frequency of the flu or other respiratory diseases, depression, pain in upper back or neck for no apparent reason, etc (Lam).

Because our world is full of chronic stressors, many of us are overstimulated and living on the edge of adrenal exhaustion. A particularly stressful event may be the tipping point, propelling a person to adrenal exhaustion. Events like car accidents, viral infections, prolonged stressful relationships and other emotional traumas, etc can contribute to adrenal exhaustion. This may be why events like these are often seen as causes of FMS. In fact, it is estimated that as many as 23 percent of people with FMS correlate a specific stressful event with the onset of symptoms (Cabrera).

FMS can also be explained by concurrent mitochondrial and hypothalamic dysfunction. To understand this, we need to understand how energy is produced in the body. Energy production occurs in little energy power-houses in our cells called mitochondria. These cells exist throughout the body, but are found in higher concentration in the muscles and brain. They create adenosine triphosphate (ATP) from food. ATP provides energy to all the cells of our body. When a cell needs to perform a function, it rips one high-energy phosphate off of ATP and spends it for the activity (Amand, Marek). If there is any mitochondrial dysfunction, there may not be enough energy available for cells to perform their tasks. Several studies have shown abnormally low levels of ATP in tissues affected by FMS. Low levels have also been found in red blood cells of those with FMS (Amand, Marek).

But what is happening in the mitochondria leading to this deficiency? One cause is the presence of excess phosphate in the inner core of mitochondria. Excess phosphate

in mitochondria strains existing ATP and makes creating new ATP harder (Amand, Marek). Cells with the highest activity are affected first, which can explain why the brain and muscles are so strongly affected by FMS. This can be seen a cause for FMS on it's own, and it can be seen as creating another problem, hypothalamic dysfunction, which also is considered a cause of FMS.

Lack of an adequate energy source caused by mitochondrial dysfunction can lead to hypothalamic dysfunction, because “anything that results in inadequate energy production or energy needs greater than the body’s production ability can trigger hypothalamic dysfunction” (Teitelbaum). A dysfunction of the hypothalamus is capable of creating the symptoms seen in FMS because it is the major control system in the body, responsible for regulating sleep, autonomic function, body temperature, hormones and more.

While there are several other theories regarding the cause of FMS, looking at mitochondrial and hypothalamic dysfunction, adrenal fatigue and stress are a great place start. From here we can introduce many therapies that are known to be helpful in FMS.

In the case of FMS, most patients go through a lot of trial and error to land on something that gives some relief. I will first go through common allopathic therapies used. Because the cause is often not addressed within the allopathic system, these drugs are used to manage symptoms. This is with the exception of Guaifenesin, which I will describe later. Drugs to manage symptoms used include: muscle relaxants, pain-killers, antidepressants, and non-steroidal anti-inflammatory drugs (NSAIDs). Doctors also recommend exercise, stretching and gentle massage.

Muscle relaxants and antispasmodics are used to manage the pain of FMS. They work with the central nervous system to reduce tension and thus reduce pain, rather than acting on the tissues directly. Some affect a person's perception of their pain more than the pain itself. They all have sedative effects, which may help the many FMS patients with sleep problems. At the same time, the sedative effects may be undesirable at other times. All muscle relaxants have several side effects. Side effects include threat of liver toxicity, physical dependence, and unknown long-term side effects. The most commonly prescribed drug in this category is cyclobenzaprine (Flexeril). Flexeril has antiparasymphomimetic (anticholinergic) activity, meaning it reduces spasms of smooth muscles by inhibiting the transmission of parasympathetic nerve impulses.

Pain-killers are also used to manage pain, but they can be harder to access. They can be very expensive, and insurance companies are known to frequently deny coverage. Even getting a doctor to prescribe one can be a difficult task. Some doctors are resistant to prescribe painkilling medications. This is because of their risky side effects, disbelief in the effectiveness of narcotics, and fear of dealing with the legal system as these are controlled substances due to their risk for addictiveness.

Easier to access are NSAIDs, which are also used to manage pain. These include: Acetaminophen (Tylenol or other generic forms), Aspirin, Ibuprofen (Advil, Motrin or others), and Naproxen (Aleve). These drugs work primarily by reducing prostaglandin population in the body. Prostaglandins perform many important tasks within the body. Some of these tasks include supporting blood clotting, protecting the lining of the stomach from stomach acid and promoting inflammation. Inflammation is necessary for healing, but also causes pain and fever. NSAIDs block an enzyme that produces

prostaglandins from fatty acid substrates. With lower prostaglandins in the body, inflammation and pain is reduced.

NSAIDs harmful side effects and should not be used long term. With NSAIDs or other painkilling drugs, it is beneficial for the patient to vary the type every couple of days and take precautions to protect the liver and kidneys from the toxic damage the drugs can cause. Acetaminophen is most damaging to the liver. It impairs proper enzyme activity in the detoxification pathway and can cause serious damage. This risk is much higher when paired with alcohol, so it is advised to not drink alcohol when taking Acetaminophen. Aspirin causes gastric disturbance that can lead to stomach bleeding as well as gastritis (inflammation of the stomach). It also contributes to joint stress and consequent inflammation by inhibiting proper hydration of cartilage. Much like Aspirin, Ibuprofen can cause serious gastrointestinal problems, including ulcers, gastritis, and gastrointestinal bleeding. It may also cause headaches, tinnitus (ringing in the ears), and dizziness. However, the side effects associated with Ibuprofen generally don't occur unless high doses are taken over a long period (Cabrera). This, and the fact that it works as an antispasmodic and muscle relaxant in addition to being anti-inflammatory, may be why some consider it the best over-the-counter analgesic to use when compared to others.

Antidepressants are used to address insomnia, pain, and depression associated with FMS. Because they can address symptoms besides depression, they are often used even if the patient does not have depression. Low doses of single serotonin reuptake inhibitors (SSRIs) taken on a daily basis (or at night) can help block the pain associated with FMS. They can also help a person fall asleep and reduce fatigue. The side effects include paradoxical insomnia, dry mouth, headaches, nausea, diarrhea, loss of libido,

restlessness, brain fog, apathy, and weight loss (Cabrera). Additionally, the sleep they may provide is not completely restorative because the alpha wave interruptions common in FMS are not inhibited. The deep sleep phase mentioned earlier can be harder to reach and is often reached for shorter durations (Cabrera).

Guaifenesin is an over the counter expectorant. Guaifenesin as a treatment for FMS, was made popular by a doctor trying to work with his own FMS. After taking the drug and having an initial worsening of symptoms, he noticed an improvement. He believes that mitochondrial dysfunction caused by excess phosphate is the cause of FMS. According to him, Guaifenesin causes elimination of excess phosphates, correcting the mitochondrial dysfunction and restoring energy to the body. There is a specific protocol to using Guaifenesin outlined in some of the resources listed in the works cited section of this paper.

There are several holistic remedies and personal practices that can be used therapeutically for FMS. Some alternative therapies include: the use of herbs internally and topically, application of topical heat, physical therapy, yoga or stretching, meditation, diet changes and use of supplements, somatic therapies addressing emotions held in the body, psychotherapy, acupuncture, naturopathic therapy, homeopathy, osteopathy, chiropractic therapy, aromatherapy, and more. Many of these therapies will help with more than one symptom at a time. They can also help a person build vitality, improving overall health and ability to heal. While many of these can be useful, this paper focuses on the use of herbal medicine.

Herbs can be used to manage symptoms without the side affects caused by pharmaceuticals. Herbs can also address underlying issues associated with FMS, like

stress, adrenal fatigue and hypothalamic dysfunction. Many herbs will address several symptoms at once. Herbs are typically organized by their primary actions, while all herbs have more than one action.

Adaptogens are an incredible category of herbs, supremely useful for FMS. They are exceptionally useful in chronic and debilitating disorders, like FMS, because they support normal metabolic function, help restore the balance of endocrine hormones, increase the bodies natural resistance to stress, prevent or delay exhaustion, protect against the effects of long-term stress, and can be used to reduce the stress reaction. They are considered broad-spectrum normalizers (or “amphoterics”) with a wide range of application (Winston, Maimes, Cabrera). They are non-toxic and safe for long-term use. They help maintain optimal homeostasis, reduce illness, restore vitality and energy, and strengthen the body.

Ashwaganda (*Withania somniferum*) may be the most useful herb for FMS. It helps manage several symptoms associated with FMS while addressing underlying issues that contribute to those symptoms. Ashwaganda is soothing and nourishing. It is considered a calming adaptogen with a relaxing affect on the nervous system. At the same time, it increases energy by revitalizing the entire system. Ashwaganda does this by modulating adrenal function, improving the quality and duration of sleep, balancing the nervous system, endocrine system and immune system. It is used for depression, anxiety, insomnia, fatigue, brain fog, nervous exhaustion, stress-induced insomnia, inflammation, muscle spasms, pain (specifically neck and back pain), restless legs syndrome (especially when taken with magnesium), arthritis, irritability, nervousness and headaches. It also has antioxidant properties, helpful in preventing cancer. Ashwaganda

works best used daily over a long period of time. Avoid using Ashwagandha in cases of hyperthyroidism, and in those sensitive to plants in the nightshade family (Winston, Maimes, Kuhn, Kent).

Another adaptogen applicable in cases of FMS is Licorice root (*Glycyrrhiza glabra*). Like Ashwagandha, Licorice helps the body process stress, promotes normal adrenal function and is used for fatigue. It is anti-inflammatory in the joints, and helps regulate the immune response. Licorice is also stimulating to mucous production in the respiratory passages as well as the stomach. Licorice is also an expectorant, so any excess mucus produced is easily released. However, the healthy amounts of mucous Licorice can help create and maintain are very important. Mucous produced in the stomach forms a protective and healing coat to gastric mucosa. This protective lining reduces peptic ulceration and helps treat and prevent leaky gut syndrome as well as other digestive disorders. Used in complementary care, Licorice can help alleviate the strain on the gut caused by NSAIDs and can protect the liver against damage from drugs or viruses.

Licorice use is not advised when taking monoamine oxidase inhibitors (MAOIs), and should be avoided by those with hypertension and edema. Licorice is considered safe for long term use, however if using Licorice for an extended period of time, a diet rich in potassium and low in sodium is recommended (as well as checking blood pressure regularly). Typically Licorice is used in a small amount in formulation as a harmonizer, as well as to enhance the flavor.

Nervines are herbs that affect the nervous system. Like adaptogens, they have a wide-range of application and are extremely helpful for FMS. They are used for depression, anxiety, insomnia, trauma, stress, emotional disturbance, pain, tension,

muscle spasms, etc. They can be taken internally or applied topically. Some nervines have a gentle relaxing action, while others are stronger sedatives. Some can be classified as muscle relaxing analgesics like Pedicularis, Kava, Black Cohosh. Some are considered strong analgesics with an effect on the central nervous system. These are typically sedative as they work by depressing central nervous system functions. Some herbs in this category are: California Poppy, Jamacian Dogwood, Wild Lettuce and Valerian. Other analgesic nervines have a different analgesic affect by increasing relaxation, increasing the pain threshold, and reducing the response to pain. These herbs can change a persons' perception of their pain, leaving them wondering, "Is there less pain, or do I just not care as much?" They also work easing stress associated with pain and therefore changing the effect of that pain. Herbs in this category include: Skullcap, Passionflower, and Lemon Balm.

Valerian root is one of the stronger sedative and anti-spasmodic nervines. It is generally used before bed rather than during the day. It is proven extremely useful for the pain, insomnia, headaches, muscle spasms, restless leg syndrome, indigestion and other digestive disturbance associated with FMS. It shortens the amount of time it takes to fall asleep, improves the overall quality of sleep, and decreases the number of times someone wakes up during the night. It also lowered both daytime pain intensity and tender point counts when used whirlpool baths (Bergner). I have personally used Valerian in combination with Chamomile, and California Poppy when I can't sleep due to mental activity. I fall asleep within five minutes of taking it and sleep through the night. I have given this same formula to my partner who has FMS, with pain and insomnia often due to muscle twitching/restless leg syndrome. The formula helps him relax, stop

twitching and get to sleep faster. Side effects may include mild gastrointestinal upset and occasional drowsiness sometimes referred to as a “Valerian hangover.” Some report that using the fresh valerian root rather than the dried helps reduce the “Valerian hangover.” I have not seen any of these side effects in my use. Use caution if taking benzodiazepines.

Pedicularis (commonly called Betony) is an extremely effective muscle relaxing nervine. Pedicularis works wonders for tight muscles, especially when they are associated with high stress and over use of adrenalin. Pedicularis can bring calm to an acute situation when someone is over stimulated, frazzled or currently tense and anxious about a specific situation. It can be helpful for muscle spasms in the night, and is a great herb to use in conjunction with other body-work, as it can improve the effects of body work. It does this by helping hold adjustments that have been made, and by helping loosen extremely tense and stubborn muscles. I have used this herb personally for neck and shoulder tightness, for entering a stressful situation, and have given it to friends, as well as my partner. Decreased muscle tension, ability to sleep at night (when it was hard before), a more relaxed state of mind, ability to handle stressful situation more calmly, and decreased muscle pain have all experienced.

Black Cohosh root is an analgesic nervine with a central muscle relaxing effect. Black Cohosh is well known for its use in hormonal regulation associated with pregnancy, menstruation and menopause. However, it an effective relaxing antispasmodic extremely useful in any chronic pain condition. It is also helpful for tinnitus (ringing in the ears) and whiplash, which are both associated with FMS. It can help ease insomnia associated with dark, brooding forms of depression (Kent), and is

especially good when pain is increased with muscular contraction and when there is “a deep, constant, dull sense of soreness (Winston).

There are several other herbs one can use for FMS. Here’s a short list: Cinnamon, Yarrow, Aralia berry, Black Birch, Meadowsweet, Marshmallow, Eluethero, St. Johns Wort, Blue Vervain, Chamomile, Oats, Fo ti, Rosemary, Cramp bark, Prickly ash, Ginger, White peony, Plantain, Hawthorn, Black/Silver Birch, Willow, Wild yam, Turmeric, Feverfew, Cayenne, Korean ginseng, Hops, Lavender, Catnip, Calendula, Corn silk, Peppermint, Sarsparilla and Nettle.

As we have seen, FMS can be a very frustrating illness with the capability of changing a persons’ entire life. It is an illness that the medical industry is failing to sufficiently address. Therapies given by doctors work only on symptoms because symptom management is the primary role of the medical industry, and because the medical industry cannot agree on a common cause. The inability to come up with a common cause illustrates quite well how important it is to look at an individual and their constitution, rather than a medical model when seeking healing on a deep level. Herbalism and other holistic healing modalities view each person as an individual and focus on the person rather than a disease. They treat the person as a whole, rather than a collection of symptoms and can cater the treatment to the variable needs of each client. This is can be extremely helpful with FMS, as symptoms vary from person to person (and even from day to day). Additionally, herbalists have the use of Adaptogens, which work on a level deeper than many other therapies (even other holistic therapies). As stated, Adatogens help strengthen and nourish the body through many mechanisms. They work on an endocrine level, addressing symptoms of chronic debilitating illnesses starting from

a place it can begin: the hypothalamus. By strengthening a person from such a deep level, adaptogens have extremely profound affects.

It is important to mention, especially in a paper that is critical of the medical industry, that sometimes pharmaceuticals are necessary. This is especially true with depression and severe pain. They may be taken for periods of time, helping a person feel well enough to seek alternative modalities. Or they may be taken for the rest of a persons' life, a life "which will last exponentially longer, by their estimation, with chemical support (Kent)". In these cases, complementary care can be extremely useful. As we have seen the use of herbs as complimentary care can be very effective and helpful by easing side-affects they may experience with pharmaceuticals. They can also help improve the overall health of a person from a wider perspective, contributing to an even deeper state of healing and well-being.

## Works Cited

<http://www.fmcpaware.org/fibromyalgia/diagnosis.html>

Fibromyalgia A Journey Towards Healing - Chanchal Cabrera

Fibromyalgia For Dummies - Staud, Adamec

American Heritage Dictionary

Complaints and Disorders- The Sexual Politics of Sickness – Enrenreich and English

Ease Your Mind: Herbs for Mental Health – Janet Kent

Alternative Treatments for Fibromyalgia & Chronic Fatigue Syndrome- Skelly and Helm

IHMT for CFS and Fibromyalgia – Jacob Teitelbaum

Fibromyalgia and the MindBodySpirit Connection - Salt and Season

What Your Doctor May Not tell you about Fibromyalgia - Amand and Marek

Pain: The science of Suffering -Wall

Valerian trials by Jill Hoppe in Medical Herbalism 12(1):16-18 Paul Bergner

Freedom from Pain - Levine and Phillips

Musculoskeletal- Fibromyalgia by Chanchal Cabrara in Medical Herbalism: Clinical Articles and Cast Studies compiled by Paul Bergner

The Use of Herbs and Complementary Therapies For Treating Chronic Back & Neck Pain - David Winston

Human Physiology - Sherwood

Adaptogens -Winston, Maimes

The New Holistic Herbal –Hoffman

A Modern Herbal –Grieve

Medicinal Plants of the Pacific West –Moore

Herbal Therapy and Supplements – Kuhn & Winston

The Earthwise Herbal (New World Medicinal Plants)- Wood

The New Healing Herbs – Castleman

Herbal Recipes for Vibrant Health –Gladstar

The Little Herb Encyclopedia – Richason

Medical Herbalism –Hoffman

American Psychiatric Association “The Diagnostic and Statistical Manual of Mental disorders” 1987

Personal interviews with Alyn Libman 2014 - 2015

<http://www.fmnetnews.com/free-articles/article-samples>

<http://umm.edu/health/medical/reports/articles/fibromyalgia>

[http://www.medicinenet.com/nonsteroidal\\_antiinflammatory\\_drugs/page2.htm](http://www.medicinenet.com/nonsteroidal_antiinflammatory_drugs/page2.htm)

[http://www.medicinenet.com/nonsteroidal\\_antiinflammatory\\_drugs/article.htm](http://www.medicinenet.com/nonsteroidal_antiinflammatory_drugs/article.htm)

<http://www.empr.com/clinical-charts/medications-with-significant-anticholinergic-properties/article/123667/>

<http://www.medicinenet.com/script/main/art.asp?articlekey=2281>

<https://www.adrenalfatigue.org/what-is-adrenal-fatigue#what-causes-adrenal-fatigue>

[http://www.drlam.com/articles/adrenal\\_fatigue.asp](http://www.drlam.com/articles/adrenal_fatigue.asp)