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This document discusses the purpose, benefits, and adverse outcomes of complementary treatment modalities.

**Complementary Treatment Modalities**

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**General Significance**

As a Nurse Practitioner at Serenity Brook Holistic Women’s Health and Wellness Clinic, many of my clients are looking into complementary treatment modalities. No longer is the vast majority seeking out prescription medications for illnesses and disease, but are pursuing natural remedies. As the Nurse Practitioner, I have educated the Registered nurses on the purpose, benefits, and adverse effects of complementary treatment modalities. They are required to be certified in complementary treatment modalities. Oregon State Board of Nursing, states that, it is under the scope of practice for a RN to provide complementary modalities to the client but certain needs are to be met. According to Oregon State Board of Nursing, one of the needs that are to be met is, “Obtain additional licensure/certification when needed (recommended or required for alternative modalities and some complementary modalities)”.

In the Serenity Brook clinic, we focus on providing our clients with the best possible care. With the various complementary treatment modalities, at our clinic, we primarily focus on Herbal Remedies. Herbal medicine, according to Konecny, are “the oldest known form of health care, that uses plants and plant extracts to treat disease and promote wellness (Rosenzweig, 2009). Herbal remedies are the most known and widely used practices in complementary and alternative medicine. Many clients in the clinic use various herbal remedies. As a Nurse Practitioner, it is vital to ask what medications or other remedies they are taking, in order to decrease any contraindications and adverse effects. Condon states, “Herbal medicinal consist of intact, unadulterated plant parts, or crude preparations made from whole pants.” Herbal medicine is on the rise in the US and the amount of those that use it is estimated to be between 15 and 37 percent, with an expected increase (Women’s Health. p. 205).

According to Condon, there are three theories why people turn to herbal remedies. First reason is that people are dissatisfied with conventional medications. They believe that is too technologically based and impersonal. The second reason is herbal remedies provides the clients with a sense of control. The third reason is it aligns with their religious beliefs.

The major use for herbal remedies is for therapy and health promotion for chronic conditions. Herbal remedies are highly significance because usage of it increases when conventional medicine is ineffective in the treatment of disease, such as advanced cancer and in the face of new infectious disease”(Galor & Benzie). Instead of taking an anti-emetic tablet/pill, the client can instead drink ginger tea. There are no side effects with ginger tea and it provides a quicker resolution to nausea. This is just one of the few benefits to natural remedies. Herbal remedies are beneficial because they have fewer side effects than conventional drugs, when taken correctly. Many believe that herbal remedies can be taken in high consumptions because it is natural, but that is untrue. Herbal remedies have benefits but there are also side effects. It is important, as a Health Care Provider, to help clients have a full and clear understanding of Herbal remedies as a treatment source.

There are many herbal remedies in existence, with substantial benefits. These remedies are used for the health and wellness of society. According to Konecny,

”Health refers to a physical being free from disease, while wellness is an overall balance of the physical, social, spiritual, emotional, intellectual, environmental, and occupational well-being of the individual.”

**Health**

Five herbal remedies that will be focused on are garlic, black cohosh (cimicifuga racemosa), gingko biloba, Echinacea, and green tea. These herbs, in accordance to the definition of health, are used to treat underlying causes of disease. Garlic, also known as Allium Sativum, is a profound herbal remedy. Garlic is a herb that has been used in people’s homes and also used for medical treatment for thousands of years. Condon states, garlic taken orally can be used to treated inflammatory respiratory conditions, bronchitis, whooping cough, GI ailments, menstrual pains, and diabetes. Garlic taken topically is used as an antibiotic and is also beneficial to treat muscle pain, ear infections, arthritis, and neuralgia (Women’s Health. p. 214). For those who take garlic for other uses besides flavoring for meals, garlic is used for the benefits it has on the body. Garlic can be taken fresh or raw, in powder form, as oil, and as juice. The active ingredient in garlic is allicin. Allicin produces the antifungal, antimicrobial, and cholesterol lowering effects. Allicin is only activated when the garlic is cut or damaged. Garlic also helps lower blood pressure and increases clotting time. It is vital for patients to know when garlic is inappropriate to take (before surgery).

Black Cohosh (Cimicifuga Racemosa) is a plant that is native to Native America. It has been used a home remedy since 19th century America. Alternative names for black cohosh are black snake root, rattleroot, and bugwort. “Black Cohosh has a history use for rheumatism (arthritis and muscle pain) but has been recently used for hot flashes, night sweats, vaginal dryness, and other menopausal symptoms. It is also used for menstrual irregularities, premenstrual syndrome, and to induce labor” (Black Cohosh ). It is also used to treat depression, sleeplessness, and hypertension during menopause (Women’s Health. p. 211). This plant is used to treat underlying illness and diseases.

Ginkgo biloba, also known as Maidenhair, is a herb. The extract of the ginkgo leaves are used medicinally. Ginkgo is widely known for its utilization of improving memory and concentration. I personally have used ginkgo biloba and it did not seem to have an effect on my cognition. Silberstein, Pipingas, Camfield, Nathan, and Stough, to determine whether ginkgo biloba improved behavioral performance in an object working memory task, did an experimental control trial. The result was, “an increase in accuracy from 71.7% in the post placebo condition to 76.8% in the post-GBE condition.” According to the results, ginkgo does work on cognition and behavior. Ginkgo biloba also treats depression, Alzheimer’s and Mental Function, Impotency, Raynaud’s disease, Parkinson’s disease, stroke, and Multiple sclerosis.

Echinacea is a popular herb that is used here in North America. In many products that claim to reduce the duration and severity of a cold, Echinacea is usually a main ingredient. In some vitamin C products (pills, cough drops), it may show “vitamin C with Echinacea”. In the earlier centuries, Echinacea was used to treat syphilis, malaria, blood poisoning, scarlet fever, and diphtheria (Echinacea. 2013). Those uses have changed since the introduction of antibiotics. Today, Echinacea is beneficial to reduce the duration of common cold and flu. It is also used to reduce the symptoms associated with the common cold, such as, cough, sore throat, and fever. Echinacea helps boost the immune system and helps fight infections. Penn State Hershey Medical Center claims, “there are three species of Echinacea: Echinacea angustifolia, Echinacea pallida, and Echinacea purpurea”. The effectiveness of Echinacea is distinguished from one product to another depending on which species is used.

Green tea is made from green tea leaves or the leaves of Camellia sinensis plant. Green tea is popular worldwide but it is especially important in Asia Countries like Japan, Korea, and China. Tea is actually one of the most consumed beverages, other than water. I was an avid drinker of green tea and knew that it helped decreased headaches. This research has helped me to know the other significant benefits of green tea. Green tea has a high level of antioxidants and tea flavonoids. It helps to fight cancer, premature aging, and other diseases by combating free radicals and neutralizing them. Green tea protects the skin, lowers cholesterol, helps with weight loss, promotes bone health, boost oral health, prevents Parkinson’s disease and Alzheimer’s disease, fights certain cancers (ovarian, bladder, esophageal), protects against diabetes, assists in the prevention of heart attack, and it boosts energy (10 Life-Sustaining Reasons to Drink Green Tea. 2012).

**Wellness**

Natural remedies will always have properties that are used to treat underlying illness, but these remedies can also be used for the overall wellness of the client. Konency says, “Wellness is a lifestyle and is not an end to be achieved.” Dong Quai (Angelica Sinensis) is a root that has been used for thousands of years as a tonic, medicine and spice. Dong quai has been used in China, Korea, and Japan. It is primarily used to help treat women’s reproductive issues, such as, hot flashes, dysmenorrheal, PMS, and menstrual cramps. Dong quai is a root that helps the whole body, which is the purpose of a state of wellness. It helps not only menstrual problems, but it relieves insomnia, treats constipation, and lowers the blood pressure. Dong quai is a general tonifier that restores function to the heart, spleen, liver, and kidneys. It is important for the previously listed organs to be restored but having a restful sleep is as equally crucial.

St John’s Wort (Klamath weed, goat weed, and hypericum) is a herb that helps the whole body. The chemicals in St. John’s wort, hypercin and hyperforin, act on chemical messengers in the nervous system that regulates mood. It can be used orally and topically.

St. John’s wort has been used as an anti-inflammatory, a sedative, an analgesic, a diuretic, an antimalarial, and a vulnerary (Women’s Health. p. 213). St. Johns has numerous benefits. According to Condon, the benefits are treatment of burns and trauma, rheumatism, hemorrhoids, neuralgia, gastroenteritis, snakebite, ulcers, contusions, sprains, diarrhea, menorrhagia, hysteria, bed-wetting, depression, anxiety, and inflammation of the skin. St. John’s wort treats the mind, which affects the soul and it treats the body. When the body, mind, and soul are treated, wellness occurs.

 Valerian is a plant that is native to Europe, Asia, and North America. It was used as a medicinal herb from ancient Greece and Rome time. Valerian acts like a sedative on the nervous system and the brain. Its therapeutic uses are for treating sleep disorders, anxiety, depression, headaches, irritability, irregular heartbeat, and trembling. This medicine is important for a persons emotional, intellectual, spiritual, social, and environmental wellbeing because once a person’s depression and anxiety are treated, he/she will be more apt to change their outlook on life for the better.

Ganoderma, also known as reishi or lucidum, is a bitter mushroom. It is a traditional Chinese/Japanese medicine. Ganoderma has been used for thousands of years and has many crucial benefits. Wong claims, ganoderma promotes health and longevity, it relieves fatigue, tames inflammation, builds stamina, balances the cholesterol level, and it supports the immune system. Ganoderma can also be used to ease inflammation of the airways with allergy-related occurrences.

 Tumeric (C. longa) is a tropical plant that originated in Asia, India, China, and in other countries with a similar climate. Turmeric is a herb. I am an avid user of turmeric and I can attest to some of the beneficial results. The active component in turmeric is curcumin. Besides being a coloring agent in various foods, tumeric has numerous benefits for ones body. Larmer says, turmeric wards off Alzheimer’s disease, decreases the risk for heart attack and stroke, helps to prevent cancer, fights cold and flu, helps indigestion and helps with weight loss. This herb, just like the previous four herbs/plants mentioned treats the mind and body, which treats the soul. That is wellness.

**Adverse Effects**

Garlic has amazing effects on the body, but there are also side effects that clients need to be warned about. As someone that regularly uses garlic, garlic can cause excessive bleeding when taken with blood thinning drugs and it can cause vertigo. It is important to sit down after consuming garlic raw or as a tea supplement. Garlic also causes myalgia, fatigue, abdominal discomfort and increased body odor (Women’s Health. p 215). It is important to take garlic for certain illnesses, but it is also vital to make sure the smell of garlic is covered up when outdoors with others. If an excessive amount of garlic is taken raw, the results are nausea, vomiting, diarrhea, flatulence, and rapid pulse. When used topically, garlic can cause third degree burns. Garlic used topically has to be diluted with water. I know this because I myself got burned doing this. Fortunately, it was not a third degree burn.

 Black Cohosh has many health benefits, and has very little side effects. The side effects are mild stomach complaints. If an overdose is taken, there will of course be horrible effects. According to Condon, the effects are lowered/elevated blood pressure, limb pains, dizziness, headaches, and vomiting. Black cohosh is contraindicated for pregnant women and those that take anti-hypertensive medications.

 Gingko biloba helps blood circulation to the brain, so the client who takes any blood thinners (aspirin, Coumadin, heparin) or anti-platelets (Plaviz, ibuprofen and naproxen drugs) needs to be warned. Gingko biloba also lowers the blood sugar, can alter the blood pressure, causes drowsiness or sedation, gastrointestinal problems (constipation, diarrhea), cardiovascular problems (heart palpitations, irregular heartbeat), psychiatric adverse effects, neurological effects (seizures, sadness, restlessness), and dependency (Ginkgo biloba. 2013). Ginkgo is contraindicated in pregnant women because of the risk of increased bleeding. Echinacea has a few side effects. Taken orally, Echinacea can cause an allergic reaction. It is important to find out if a client is allergic to ragweed, daises, marigolds, or mums. If allergic to any of those things, it is advisable to not take Echinacea. Condon claims, “The few reported side effects are limited to minor gastrointestinal symptoms and increased urination.” Pregnant women should avoid the Echinacea extract injection.

 Green tea side effects are based on the caffeine in it. The caffeine level in green tea is 30-60 mg in 6-8 oz compared to 100mg in 80z of coffee. The side effect is insomnia. With excessive intake of green tea per day, the side effects, based on the abundance of caffeine, is increased anxiety, bleeding disorders, diarrhea, irritable bowel syndrome, glaucoma, liver disease, and osteoporosis (Find a Vitamin or Supplement: Green tea. 2014). Dong quai has no existing side effects. Women who have heavy menstruations and women in their first three months of pregnancy should not take dong quai. Dong quai is contraindicated with blood thinners. Condon, “dong quai should not be taken with anticoagulants or blood thinning supplements because there is an increased risk for bleeding.”

 St John’s Wort has been reported to be safe. The side effects that have been reported are from less than 1 percent of those in the particular study group. St. Johns is phototoxic in animals and should not be used on animals. St. John’s wort has few side effects but should not be used with many pharmaceutical drugs such as antidepressants, monoamine oxidase inhibitors (MAOI), and drugs that effect the central nervous system.

Valerian is safe when used for a short time period (less than 6 weeks). Side effects associated with Valerian are tiredness the morning after its use, dizziness, upset stomach, and headaches (Valerian. 2012). Valerian should not be used if the client is pregnant, scheduled for a surgery in the next two weeks, or before driving.

 Ganoderma is very bitter and can be taken as a capsule and liquid. If used as a liquid, take in tea and coffee. Side effects experienced are dry throat, dry nose, and nausea. Ganoderma should not be taken with anticoagulants and some chemotherapeutic agents. Turmeric in food is considered safe. If taken by itself, it is considered safe with recommended doses. University of Maryland Medical Center states, “taking large amounts of turmeric over long periods of time can cause stomach upset, ulcers, it can lower blood sugar levels, and it is contraindicated with blood thinning medications and drugs that reduce stomach acid.”

**Research Evidence**

Green tea: Health Benefits by V.R. Sinija, & H. N Mishra.

Study overview: Camelia sinensis yields a white, black, and green tea. Tea is a highly consumed beverage next to water. Green tea has antioxidants and flavonoids. There are four major flavonoids, which are the catechins, in green tea. Green tea is used for a wide variety of implications, including different types of cancer, heart disease, liver disease, etc (Green tea: Health Benefits. p. 232). It also is used for diabetes, exercise enhancement, IBD, hair loss, weight loss, skin disorders, and iron overload. "This paper will review the major benefits of green tea, focusing on the catechins” (Green tea: Health Benefits. p. 232).

Study findings: Green tea has anti-carcinogen proprieties. Sinija & Mishra claim, “It has been suggested that EGCG (a catechin of green tea)…suppress tumor growth by inhibiting the release of tumor necrosis factor-alpha, which is believed to stimulate tumor promotion and progression of initiated cells as well as pre-malignant cells.” Green tea lowers cholesterol.

Sinija & Mishra state, “ One population-based study by Tokunaga et al. found that men who drink green tea are more likely to have lower total cholesterol than those who do not drink green tea. The subjects were 13,916 workers aged 40-69 years at 1000 workplaces. Serum cholesterol of total cholesterol, HDL cholesterol, and triglycerides were measured at the screening. Green tea was also measured. After additional adjustment for selected dietary factors, the inverse association with a reduction in serum total cholesterol by 0.010mmoL-1 in men and 0.012mmoL-1 in women.”

Role of Garlic Usage in Cardiovascular Disease Prevention: An Evidence-Based Approach by Waris Qidwai & Tabinda Ashfaq.

Study overview: A rapidly growing prevalence of cardiovascular disease is a major threat and warrants an urgent need of intervention. Complementary medicines are gaining popularity because they are deemed safer and because of its easy administration. Garlic is considered to be a one of the best preventative foods because it is potent and has widespread effects. This study was done to find out the role garlic has on the prevention of cardiovascular disease.

Study findings: Qidwai and Ashfaw concluded that “the beneficial effect of garlic preparations on lips and blood pressure extends also to platelet function, thus providing a wider potential protection of the cardiovascular system through its major effects on cholesterol reduction. Its efficacy on blood pressure reduction is mild with some beneficial effects on platelet aggregation.

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