Department of Family Medicine and Community Health



Integrative Approaches to Women's Health

Overview

This overview focuses on how Integrative Health can be useful with prevention and treatment of health concerns that are specific to women. As with all aspects of our health, women's health issues do not exist in isolation; focusing on menstrual problems, menopause, fibroids, endometriosis, and other challenges must be done with the full picture in mind. Integrative Health emphasizes mindful awareness and general self-care along with conventional and integrative approaches to health and well-being. The Circle of Health highlights eight areas of self-care: Surroundings; Personal Development; Nutrition; Recharge; Family, Friends, and Coworkers; Spirit and Soul; Mind and Emotions; and Physical Activity. Many studies have shown potential benefit with certain complementary approaches. The patient narrative below provides an example of what might be covered in women's health-focused encounters, specifically around polycystic ovarian syndrome and menopause.

Meet the Patient

Julie is a 24-year-old who college senior. She presents to discuss worsening and contraceptive options. In reviewing her gynecologic history, Julie reports irregular and infrequent periods, occurring over the last few years. On exam, she has significant acne over her face and back. There are scattered coarse, dark hairs present on her chin and chest. Based on this presentation, her provider suspects a diagnosis of polycystic ovarian syndrome (PCOS). Laboratory evaluation shows normal TSH and prolactin levels. A pelvic ultrasound demonstrates a normal appearing uterus; however, multiple simple cysts are present in her bilateral ovaries. Without additional findings to suggest an alternative diagnosis, Julie diagnosis is PCOS. Subsequent labs reveal an elevated hemoglobin A1C of 5.8% and a cholesterol panel showing elevated triglycerides and LDL.

Currently, Julie attends classes to finish her undergraduate degree while working part-time. Her days are often hectic—she eats fast food for at least one meal a day and does not exercise. She gained 10 pounds over the past year and her BMI is 29 kg/m². She often mindlessly snacks at night while doing homework, eating a bag of chips or candy. Julie feels overwhelmed by her responsibilities, which often keep her up late into the night so that she only averages 4-5 hours of sleep. She has not had much time to explore her interests, hobbies, or even to spend time reconnecting with friends.

Personal Health Inventory

On her Personal Health Inventory (PHI) Julie rates herself a 2 out of 5 for her overall physical well-being and a 3 for overall mental and emotional well-being. When asked what matters most to her and why she wants to be healthy, Julie responds:

"Although all my time is currently devoted to financing and finishing my undergraduate degree, family and friends really matter to me. I want to be healthy to be able to connect with people and walk my dog. I need to feel like my schedule is under control."

Department of Family Medicine and Community Health



For the eight areas of self-care, Julie rates herself on where she is, and where she would like to be. Julie decides to first focus on the areas of Food and Drink and Family, Friends, and Co-Workers by returning to a healthy diet and dedicating a short period each week to her friends and family.

Julie's PHI has additional information.

Introduction

Polycystic ovarian syndrome (PCOS) is a clinical diagnosis characterized by oligoovulation, hyperandrogenism, and often the presence of polycystic ovaries. A common disorder, PCOS affects about 10% of reproductive age women.¹ Women often present with amenorrhea or oligomenorrhea, hirsutism with acne and male-pattern hair growth, weight gain, and difficulty with fertility. PCOS is associated with an increased risk of developing diabetes mellitus and cardiovascular disease.

Diagnostic criteria for PCOS vary by organization, although all include a component of ovarian disease and the exclusion of alternative diagnoses (see Table 1). Differential diagnosis includes thyroid disease, hyperprolactinemia, androgen-secreting tumors, adrenal hyperplasia, and Cushing's syndrome. Depending on presenting symptoms, consider laboratory testing that includes a pregnancy test, TSH, prolactin, fasting glucose to insulin ratio, total and free testosterone levels, dehydroepiandrosterone (DHEA), sulfate, morning 17a-hydroxyprogesterone, and 24-hour urine cortisol level. Transvaginal ultrasound may show characteristic changes associated with PCOS but is not required for the diagnosis if the hormonal features of PCOS are present.

Table 1. Differing Criteria for Polycystic Ovarian Syndrome Among Organizations ²

Organization	Criteria	Ovarian Dysfunction	Ovarian Morphology	Hyper- androgenism
National Institutes of Health (1990)	Both of the following and exclusion of related disorders	Oligo- ovulation (less than 6 menses per year)	Not applicable	Clinical or biochemical (not specified)
Rotterdam Group (2003)	Any two of three of the following and exclusion of related disorders	Oligo- anovulation (nonspecified)	Polycystic ovaries (>12 follicles 2 mm-9 mm, or ovarian volume >10mL)	Clinical or biochemical (free testosterone or free testosterone index)
Androgen Excess Society (2006) [5]	Hyperandrogenism as critical, with addition of at least one ovarian marker	Oligo- anovulation and/or polycystic ovaries	Oligo- anovulation and/or polycystic ovaries	Clinical or biochemical (free testosterone)

Department of Family Medicine and Community Health



Organization	Criteria	Ovarian Dysfunction	Ovarian Morphology	Hyper- androgenism
	and exclusion of related disorders			

Reprinted with permission from Elsevier Copyright 2012

PCOS results from various endocrine and metabolic abnormalities, including hypothalamic-pituitary dysfunction, abnormal ovarian hormone production, and hyperinsulinemia. These imbalances perpetuate a sequence of elevated testosterone, abnormal estrogen to progesterone ratio, insulin resistance, and dysregulation of the hypothalamic-pituitary feedback system.²

Treatment of PCOS is directed at decreasing insulin resistance, reducing hyperandrogenism, managing diabetes and cardiac disease if present, and addressing fertility concerns. Lifestyle modifications should be emphasized to improve insulin sensitivity and promote weight loss. Conventional approaches include insulin sensitizers such as metformin, oral contraceptive pills with low androgenic activity, progestins for endometrial protection, and antiandrogens for symptoms of hirsutism. ⁵ However, a comprehensive approach that considers a woman's overall health is important, as the syndrome of PCOS indicates underlying systemic imbalances that need to be addressed.

Early Adulthood Self-Care

Physical Activity

Regular, moderate physical activity should be encouraged in all women with PCOS. Evidence shows that regular exercise helps to promote weight loss, improving ovulation and insulin resistance.⁵ Even a 5% loss of initial body weight can result in significant improvements in metabolic and hormonal balance, especially in women with a BMI greater than 30.⁶

Nutrition

To address insulin resistance, a low-carbohydrate, low-glycemic index, high-fiber diet should be encouraged.² Appropriate dietary guidelines include the anti-inflammatory diet or the Mediterranean diet; both limit intake of processed foods, red meat, and dairy high in saturated fat. More information is available in the "<u>Nutrition</u>" overview.

Mind and Emotions

Women with PCOS have increased sympathetic nervous system activity, often in addition to anxiety and depression.² For this reason, mind-body interventions to address stress management and teach relaxation and breathing exercises can improve heart rate variability and decrease sympathetic tone⁷; for more information reviews the "Heart Rate Variability and Arrhythmias" Integrative Health tool. A few small studies have shown that women with PCOS receiving acupuncture had increased rates of ovulation and decreased sympathetic tone.⁸ Although women with PCOS may benefit

Department of Family Medicine and Community Health



from additional mind-body techniques and complementary modalities, at this time little research exists to document their efficacy.

PCOS: Supplements

Note:. Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

There are multiple supplements with proposed benefit in PCOS, addressing both insulin resistance and hyperandrogenism. Although the evidence varies for each of these products, they may be helpful as part of a holistic approach to the treatment of PCOS.

Vitamin D regulates insulin secretion. Lower levels may be associated with higher BMI and insulin resistance. Meta-analysis of 11 trials demonstrated that vitamin D supplementation in women with PCOS may improve insulin sensitivity. Consider supplementing to 2,000 units daily, or higher doses if indicated by serum 25-OH vitamin D levels.⁹

Inositol mediates insulin activity in the body. Supplementation with D-*chiro*-inositol (DCI) has been shown to improve insulin sensitivity and ovulation, decrease triglyceride and testosterone levels, and support weight loss.² D-pinitol, more accessible commercially, increases serum levels of DCI and decreases glucose levels, although research findings are mixed. The suggested dose of both DCI and pinitol is 600 mg twice daily. Both are generally well tolerated.¹⁰

Chromium is a mineral that improves insulin function and decreases blood glucose levels. A meta-analysis of 7 trials found that chromium supplementation improved BMI, free testosterone, and fasting insulin in PCOS. ¹¹ The FDA reports that chromium can be used safely in doses of 200 mcg daily for up to 6 months; in many studies, 1,000 mcg daily has been used safely. There is insufficient information, however, to comment on safety in long-term use. The suggested dose is 200 to 1,000 mcg of chromium picolinate in divided doses daily. Interactions with medications can occur, especially with thyroid hormone. Side effects include headache, sleep disturbances, and mood issues. Avoid chromium in people with kidney disease. ¹²

N-acetylcysteine (NAC) is a precursor to glutathione, a powerful antioxidant. It is used in many conditions, and some evidence supports its use in improving insulin sensitivity and decreasing inflammation.² The suggested dose is 1,200 to 1,800 mg daily in divided doses. NAC generally is well tolerated, with occasional nausea reported.

Licorice (*glycyrrhiza glabra*) has antiandrogenic effects. It can be taken alone, and it also works well with spironolactone to counter its side effects of hyperkalemia and low blood pressure. The suggested dose is 500 mg standardized to 6%-15% glycrrhizin. Due to its mineralocorticoid properties, short-term and closely monitored use is recommended. Toxicities include hypokalemia, hypertension, and fluid retention.¹³

Department of Family Medicine and Community Health



Additional supplements and herbs have glucose-lowering effects, and their use should be considered in the treatment of PCOS. More information and additional suggestions can be found in the "Endocrine Health" overview.

Personal Health Plan

Name: Julie

Meaning, Aspiration, Purpose (MAP):

My mission is to create a better balance in my life to promote health and happiness.

My Goals:

- Walk to class or with my dog at least daily.
- Commit to at least 7 hours of sleep each night.
- Pack lunches, limit eating out.
- Substitute fruits and vegetables for unhealthy snacks.
- Learn and implement ways to reduce and manage stress.

Mindful Awareness:

- Stress Management
 - Schedule an appointment to meet with one of the health psychologists to learn techniques for stress reduction. Find a practice that resonates and consider dedicating 5-10 minutes each day performing that practice.

Areas of Self-Care:

- Physical Activity
 - o Incorporate some form of movement into every day. Weather permitting, walk rather than use the bus. Walk my dog for at least 30 minutes three times a week, if not more.
- Nutrition
 - Pack own lunches and limit eating out to only twice weekly. When eating out, make healthy food choices. Stop buying processed, high-carbohydrate and highglycemic index foods and replace them with fruits and vegetables. Consider following an anti-inflammatory diet or Mediterranean diet to guide meals at home.
- Recharge
 - Commit to sleeping at least seven hours a night. This will allow for clearer thoughts and more productivity with school and work responsibilities.
- Family, Friends, and Co-Workers/Personal Development
 - Dedicate time each week to connect with a friend or family member. Work to be mindful during that time, not distracted by other school or work responsibilities.

Department of Family Medicine and Community Health



Professional Care: Conventional and Complementary

- Prevention/Screening
 - o Up-to-date
- Treatment (e.g., conventional and complementary approaches, medications, and supplements)
 - Walking
 - Health food choices
 - Medications
 - Oral contraceptive pills (OCPs)
 - Inositol 600 mg twice daily to improve blood sugars and cholesterol levels associated with PCOS. It may also help support weight loss.
- Skill building and education
 - Nutrition
 - Sleep
 - Stress management

Referrals/Consults

Health psychologist

My Support Team

- Primary Care Provider
- Best friend
- Parents
- Dog

Follow-up with Julie

Through the process of completing her personal health inventory, Julie realized that her school and work responsibilities dominated her life and that she was not making time for herself. She saw that eating unhealthily and not exercising resulted in weight gain that perpetuated insulin resistance. She appreciated the relationship between not sleeping enough and her worsening mood and concentration difficulties. She acknowledged that she was spending little time participating in activities and interacting with people that she enjoyed. Her choices were negatively impacting her own health.

With this new awareness, Julie committed to changing her lifestyle to prioritize her health. She began by packing her own lunches, limiting eating out to twice weekly, and swapping out fruits and vegetables in place of high-carbohydrate, high-glycemic index snacks. She started walking to classes instead of taking the bus and walked her dog outside for at least 30 minutes three times a week. To help improve her insulin sensitivity, she decided to try inositol. To help with contraception, Julie started taking an oral contraceptive pill with low androgenic activity, and her periods became regular. She committed to sleeping at least seven hours a night and as a result found it easier to concentrate on work during the day. She set a goal of scheduling at least one social interaction with friends or family each week. Julie met once with a health psychologist

Department of Family Medicine and Community Health



who reviewed mind-body techniques for stress reduction that she could use and practice on her own.

Later in Julie's Life

Years later at the age of 49, Julie returns to the clinic. She has remained committed to a healthy lifestyle over the years, exercising for 30-45 minutes at least three times a week at her local gym. She eats a diet with moderate fruits and vegetables, and through her efforts has maintained a normal body weight. She has three children and a supportive husband; she is an elementary school teacher.

Julie presents with menopausal symptoms. Her periods have become irregular, often skipping months. She experiences troublesome hot flashes that interfere with work and sleep. Pain from vaginal dryness has caused less frequent sexual intercourse, straining her relationship with her husband. Although she has heard of hormone replacement therapy, Julie is interested in trying other, more "natural" approaches. She is interested in overall recommendations to keep her healthy as she approaches her 50th birthday.

Personal Health Inventory

Julie rates herself a 4 out of 5 for her overall physical well-being and a 3 for overall mental and emotional well-being. When asked what matters most to her and why she wants to be healthy, Julie responds:

"Raising healthy, well-balanced children with a sense of values and responsibility. Continuing to grow in my marriage. Finding ways to help others and give back. Spending time with my family. I enjoy connecting with friends and walking my dog."

For the eight areas of self-care, Julie rates herself on where she is, and where she would like to be. Julie decides to first focus on the areas of Recharge and Spirit and Soul by learning more about bioidentical hormones and becoming more active in her church.

For more information, see Julie's PHI.

Menopause

Menopause is the cessation of menstrual cycles, occurring for most women between the ages of 47 and 55 years. During perimenopause, as estrogen levels decrease, women often experience hot flashes, night sweats, vaginal dryness, and mood swings. While some women experience debilitating symptoms, others transition through this time with few complaints. Unless precipitated by surgery or illness, menopause is part of the natural aging process. As such, remind women to consider this time as an opportunity to celebrate their beauty, strength, and vitality by recommitting to a healthy lifestyle.

Controversy exists regarding the practice of measuring hormone levels for the diagnosis, treatment, and monitoring of menopause and its symptoms. Testing may not be reliable depending on the source (serum, saliva, or urine) and the method of hormone replacement administration. Because of the lack of research, routine testing is likely unnecessary for most

Department of Family Medicine and Community Health



women.¹⁴ The diagnosis of menopause should be made based on clinical findings; treatment is based on symptoms.

Self-Care During Menopause

Before addressing specific symptoms, clinicians should review the importance of a comprehensive approach to wellness during the menopausal transition. Cardiac and bone health should be addressed because of the increased risk of coronary artery disease and osteoporosis.

Physical Activity

Regular exercise has significant benefits for overall health and well-being. Exercise should include muscle strengthening, weight-bearing activities, and yoga or tai chi to strengthen the mind-body connection. A Cochrane review in 2011 found that non-weight bearing, high-force activities such as progressive resistance strength training was most effective in increasing femur neck bone density, whereas combinations of aerobic activity, weight-bearing, and resistance exercises improved bone density of the spine.

A 2007 Cochrane review concluded the evidence was insufficient to determine the effectiveness of exercise on hot flashes. ¹⁶ In a recent study, regular exercise did not alleviate hot flashes, but did result in improved sleep and mood. ¹⁷

Additionally, exercise promotes blood flow to the genital region, which improves vaginal dryness. At least one orgasm a week is recommended for women, either by themselves or with someone else, to encourage healthy blood flow and improve nerve sensation. Women with vaginal dryness should use a vaginal moisturizer daily to maintain moisture and flexibility, while improving blood flow. The product should be massaged in small, circular strokes into the inner vagina and outer vulvar region once a day for five minutes, using a vibrator for internal placement and massage. A lubricant may be necessary with intercourse to prevent worsening dryness. For women who continue to experience vaginal dryness despite these interventions, intravaginal estrogen will significantly improve symptoms. More information is available in the "Menopause" and "Hormone Replacement Therapy" Integrative Health tools.

Nutrition

Especially at this time, a healthy diet should be encouraged to maintain an optimal body weight. For many, this diet incorporates whole, unprocessed foods consisting of primarily fruits and vegetables, whole grains, and low-fat protein. For more information, see the "Nutrition" overview. Foods high in calcium should be encouraged, with the goal of 1,000-1,200 mg daily as recommended by the Institute of Medicine.¹⁸

Consider adding sources of phytoestrogens, which are plant compounds with structures similar to estrogen that result in their ability to cause estrogen-like effects on the body. Sources of phytoestrogens include soy (isoflavone) and flaxseed (lignan). For more information, see the "Phytoestrogens" Integrative Health tool.

Department of Family Medicine and Community Health



Mind and Emotions

Exploration of the mind-body connection can bring awareness to menopause as a life transition. Helpful tools include <u>breathing</u> exercises, <u>mindfulness meditation</u>, <u>yoga</u>, <u>tai chi</u>, or <u>Guided Imagery</u>. "Mastering Menopause," a CD by Belleruth Naparstek, includes Guided Imagery practices to help with sleep, reinforce self-esteem, and redefine beauty and aging.

Explore stress management techniques. The body's stress hormone, cortisol, is made from precursors that include progesterone. With an increasing need for cortisol production because of high stress, progesterone levels may decrease, disrupting the balance of estrogen and progesterone in the body. Review approaches for decreasing stress, in addition to coping techniques, relaxation exercises, and mind-body practices.

Spirit and Soul

Menopause is a great time to explore a connection in life that gives a greater sense of meaning and purpose. Helpful tools include journaling, meditation, or connecting with religious or spiritual communities. Connecting with wise, older women who have transitioned into and through menopause can be a powerful experience.

Menopause Supplements

Note:. Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

Vitamin D

The Institute of Medicine recommends 600 IU daily for women age 70 and under and 800 IU daily for women older than 70.¹⁸ Consider checking a vitamin D level or supplementing with higher doses of 1,000-2,000 IU daily for women at higher risk of deficiency (northern/southern climates, darker skin, elderly) to help support bone health.

Black Cohosh (Cimicifuga racemosa)

Black cohosh is an herb with estrogenlike properties. Results are inconsistent for the effects of black cohosh on menopausal symptoms, with significant variation among the preparations studied. A 2012 Cochrane review concluded that the evidence for use of black cohosh for menopausal symptoms is insufficient; however, "there is adequate justification for conducting further studies in this area." The most conclusive evidence is for a commercial product *Remifemin*, containing 1 mg of black cohosh triterpenes per 20 mg tablet. Studies show it significantly reduces menopausal symptoms and hot flash frequency when compared to placebo. The standard dose is 40 mg once or twice daily. Side effects are rare, and most common is mild gastrointestinal discomfort. Because a small number of women have experienced liver problems while taking black cohosh, consider monitoring liver function tests and avoid use in women with liver disease. Use of black cohosh for longer than six months has not been studied, including its effects on endometrial hyperplasia.

St. John's Wort (*Hypericum perforatum*)

Commonly used for depression, St. John's wort has been shown to improve mood and climacteric complaints in menopausal women. In one particular study, women using the

Department of Family Medicine and Community Health



combination of St. John's wort and black cohosh reported improved scores for general menopausal symptoms and depression when compared to placebo.²¹ The suggested dose is 300 mg three times daily, standardized to 0.3% hypericin or 4-5% hyperforin. St. John's wort is generally tolerated well but should be used with caution in combination with other medications metabolized through the P450 system.

Other Therapies

Although extensive research has not yet been done, some women find significant benefit from complementary therapies and approaches such as acupuncture, energy work, Chinese medicine, or Ayurveda. Acupuncture has shown to reduce the frequency and severity of vasomotor symptoms in perimenopause and menopause, both individually and as adjunctive treatment.²² Research also supports its use in reducing sleep disturbances caused by menopause-related symptoms.²³ Use of mindful awareness, meditation, and clinical hypnosis have not been shown to improve menopausal symptoms.²⁴ Tai chi has been shown to improve overall general health, vitality, and bodily pain.²⁵ One must consider potential side effects and risks when considering these therapies, though with acupuncture and tai chi they tend to be quite rare.²⁶

Hormone Replacement Therapy (HRT)

Hormone replacement therapy (HRT) is the most effective treatment for vasomotor menopausal symptoms. For many years, clinicians used systemic HRT to treat women in menopause, believing that HRT could benefit cardiovascular health, prevent osteoporosis, and help women live longer and healthier lives. In 2002, however, the Women's Health Initiative (WHI) changed this practice. The trial was stopped early because the results showed that the risks of hormone replacement with estrogen and progesterone in women with a uterus outweighed the potential health benefits. Subsequent research has further clarified the risks associated with HRT, as critics felt that the results of the WHI trial could not be generalized because the participants were older (primarily 60s and 70s) and used only oral preparations of estrogen and progesterone.

The risks of hormone replacement therapy vary with the type, dose, route of administration, duration of use, and age of initiation. Research has shown that oral HRT (both estrogen-only and combined estrogen and progesterone) increases the risk of thromboembolic events, with risk of stroke increasing with age, and with initiation of therapy >10 years from onset of menopause. Estrogen plus progesterone therapy is associated with a small increased risk of breast cancer, which is greater with use of synthetic progestins (i.e., medroxyprogesterone acetate). HRT is also associated with an increased risk of gallbladder disease, although overall risk is low.^{27,28}

For many women, HRT can be used safely to help manage menopausal symptoms, using the lowest effective dose to treat symptoms and minimize risks. The "<u>Hormone Replacement Therapy</u>" tool provides more information.

Department of Family Medicine and Community Health



Bioidentical Hormone Therapy

Since publication of the WHI trial, alternatives for the treatment of menopausal symptoms have become popular, including bioidentical hormone replacement therapy (BHRT). Bioidentical hormones, by definition, are identical in chemical structure to those hormones made by the body. Often the media refers to these hormones as "natural;" however, "natural" can have many meanings. Some use "natural" to suggest that the hormones come from nonsynthetic or nonartificial sources (such as wild yams or soybeans). Others use "natural" to describe the process of supplementing hormone levels and types that are similar to those levels and types in the human body. By definition, "bioidentical" only communicates that the hormone structure is identical to that of the body.

Compounded bioidentical hormones are custom-made formulations of multiple bioidentical hormones. Many women seek out compounded BHRT, believing it to be safer than standard HRT. Many of these formulations are not approved by the Food and Drug Administration (FDA). However, the FDA has approved bioidentical pharmaceuticals of both estrogen and progesterone that are carefully controlled and regulated, allowing for improved safety and known risks. If women are interested in using bioidentical hormone therapy, consider the FDA-approved products.

Hormone replacement therapy significantly improves the symptoms of menopause. Because of the risks, using HRT/BHRT should be an individual decision that each woman makes with help from her provider based on her attitude toward menopause, menopausal symptoms, personal medical history, and family history. The "Hormone Replacement Therapy" tool has more information.

Personal Health Plan

Name: Julie

Meaning, Aspiration, Purpose (MAP):

My mission is to transition through menopause with optimal health, rededicating time to friends and community service.

My Goals:

- Decrease hot flashes through a trial of black cohosh and increasing phytoestrogens in my diet
- Commit to a volunteer activity through church
- Reach out to women friends to share stories of transitioning through menopause
- Perform daily vaginal massage using a moisturizer or lubricant

Mindful Awareness:

- Stress Management
 - Explore meditation or Guided Imagery practice either online or by purchasing Belleruth Naparstek's CD, "Mastering Menopause."

Department of Family Medicine and Community Health

Areas of Self-Care:

- Physical Activity
 - Continue to make time for regular exercise, focusing on muscle strengthening and resistance training activities. Actively treat vaginal dryness to allow for a healthy, regular sex life with your husband.
- Nutrition
 - Continue to make healthy food choices, with regular intake of fruits and vegetables. Include foods high in calcium with the goal of 1,000-1,200 mg daily. Add sources of phytoestrogens including whole soy and flaxseed to help with hot flashes.
- Spirit and Soul
 - Consider keeping a journal while approaching this life transition, continuing to explore those things in life that give me meaning and purpose. Continue to make time for family and children while engaging in other activities that interest me: church, connecting with other women, more exercise, and volunteering.
- Family, Friends, and Co-Workers/Personal Development
 - Reach out to women who have experienced or are experiencing their own journey through menopause.

Professional Care: Conventional and Complementary

- Prevention/Screening
 - Up-to-date
- Treatment (e.g., conventional and complementary approaches, medications, and supplements)
 - Black Cohosh supplement 40 mg daily
 - Phytoestrogens
 - Vaginal massage with vaginal moisturizer
 - Medication/Guided Imagery
- Skill building and education
 - Journaling
 - Nutrition
 - Volunteering

My Support Team

- Primary Care Physician
- Husband
- Children
- Girlfriends
- Church

Department of Family Medicine and Community Health



Follow-Up with Julie

Through the process of completing her personal health inventory, Julie realized the importance of connecting with friends and getting involved in her community through church and volunteer activities. She started to keep a journal and devoted time most days to a meditative practice. By taking care of herself in this way, she felt healthier and comforted by the importance of setting a good example for her children.

Julie started using black cohosh regularly and increased her daily intake of dietary phytoestrogens. To promote bone health, she ensured adequate intake of both calcium and vitamin D and varied her activities at the local gym to include muscle strengthening and resistance training activities. She found a guided meditation for menopausal women on the Internet and listened to it regularly. She committed to a daily routine of vaginal massage using a moisturizer, which helped with dryness during intercourse. After a long discussion on the risks and benefits of hormone replacement, she decided to consider a trial of intravaginal estrogen if vaginal dryness persisted despite regular moisturizing massage. Although hot flashes were still present, she was better able to tolerate them.

Integrative Health Tools

- Dysmenorrhea, Menstrual Cramping
- Endometriosis
- Estrogen Dominance
- Fibroids
- Hormone Replacement Therapy
- Menopause
- Phytoestrogens
- Polycystic Ovarian Syndrome

Resources

Books

- Better than I Ever Expected: Straight Talk About Sex after 60, Joan Price (2006)
- Our Bodies, Ourselves: Menopause, Boston Women's Health Book Collective (2010)
- Women's Bodies, Women's Wisdom: Creating Physical and Emotional Health and Healing, Christiane Northrup, MD (2010)

Retail

A Woman's Touch: Products and information

Author(s)

"Women's Health" was adapted for the University of Wisconsin Integrative Health Program from the original written and updated by Anne Kolan, MD (2014, updated 2020). Modified for UW Integrative Health in 2021.

This Integrative Health overview was made possible through a collaborative effort between the University of Wisconsin Integrative Health Program, VA Office of Patient Centered Care and Cultural Transformation, and Pacific Institute for Research and Evaluation.

Department of Family Medicine and Community Health



References

- 1. Carrizales A, Keehbaugh J. Polycystic ovary syndrome. Updated November 19, 2019. Accessed August 12, 2020. https://www-essentialevidenceplus-com.ezproxy.library.wisc.edu/content/eee/247
- 2. Ring M. Polycystic ovarian syndrome. In: Rakel D, ed. *Integr Med*. 3rd ed. Elsevier Saunders; 2012:345-352.
- 3. Zawadzki J, Dunaif A. Diagnostic criteria for polycystic ovary syndrome: towards a rational approach. In: Dunaif A, Given J, Haseltine F, Merriam G, eds. *Polycystic Ovary Syndrome*. Blackwell Scientific; 1992:377-384.
- Rotterdam ESHRE/ASRM-sponsored PCOS consensus workshop group. Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome (PCOS). Hum Reprod. 2004;19:41-47.
- American College of Obstetricians and Gynecologists (ACOG). ACOG Practice Bulletin No. 194: Polycystic ovary syndrome. *Obstet Gynecol*. Jun 2018;131(6):e157-e171. doi:10.1097/aog.000000000002656
- 6. Clark AM, Thornley B, Tomlinson L, Galletley C, Norman RJ. Weight loss in obese infertile women results in improvement in reproductive outcome for all forms of fertility treatment. *Hum Reprod*. Jun 1998;13(6):1502-5.
- 7. Utzinger-Wheeler M. Enhancing heart rate variability. In: Rakel D, ed. *Integr Med*. 3rd ed. Elsevier; 2012:849-855.
- 8. Bongaard BS. Polycycstic Ovary Syndrome. In: Maizes V, Dog TL, eds. *Integrative Women's Health Ed.* Oxford University Press; 2010:271-282.
- 9. Lagowska K, Bajerska J, Jamka M. The role of vitamin D oral supplementation in insulin resistance in women with polycystic ovary syndrome: a systematic review and meta-analysis of randomized controlled trials. *Nutrients*. Nov 2 2018;10(11)doi:10.3390/nu10111637
- 10. Natural Medicines Comprehensive Database. Inositol. Accessed March 22, 2020, http://naturaldatabase.therapeuticresearch.com/nd/Search.aspx?cs=&s=ND&pt=100&id=299&fs=ND &searchid=44509461
- 11. Fazelian S, Rouhani MH, Bank SS, Amani R. Chromium supplementation and polycystic ovary syndrome: a systematic review and meta-analysis. *J Trace Elem Med Biol*. Jul 2017;42:92-96. doi:10.1016/j.jtemb.2017.04.008
- 12. Natural Medicines Comprehensive Database. Chromium. Updated April 2, 2020. Accessed April 28, 2020, https://naturalmedicines.therapeuticresearch.com/databases/food,-herbs-supplements/professional.aspx?productid=932
- 13. Natural Medicines Comprehensive Database. Licorice. Updated April 22, 2020. Accessed April 28, 2020, https://naturalmedicines.therapeuticresearch.com/databases/food,-herbs-supplements/professional.aspx?productid=881
- 14. Hudson T. Menopause. In: Maizes V, Dog TL, eds. *Integrative Women's Health*. Oxford University Press; 2010:366-384.
- 15. Howe TE, Shea B, Dawson LJ, et al. Exercise for preventing and treating osteoporosis in postmenopausal women. *Cochrane Database Syst Rev.* 2011;(7):Cd000333. doi:10.1002/14651858.CD000333.pub2
- 16. Daley A, Stokes-Lampard H, Macarthur C. Exercise for vasomotor menopausal symptoms. *Cochrane Database Syst Rev.* 2011;(5):Cd006108. doi:10.1002/14651858.CD006108.pub3
- 17. Sternfeld B, Guthrie KA, Ensrud KE, et al. Efficacy of exercise for menopausal symptoms: a randomized controlled trial. *Menopause*. Apr 2014;21(4):330-8. doi:10.1097/GME.0b013e31829e4089
- 18. Straube S, Derry S, Straube C, Moore RA. Vitamin D for the treatment of chronic painful conditions in adults. *Cochrane Database Syst Rev.* May 6 2015;2015(5):Cd007771. doi:10.1002/14651858.CD007771.pub3
- 19. Leach M, Moore V. Black cohosh (Cimicifuga spp.) for menopausal symptoms. *Cochrane Database Syst Rev.* 2012;9CD007244. doi:10.1002/14651858.CD007244.pub2

Department of Family Medicine and Community Health



- 20. Natural Medicines Comprehensive Database. Black Cohosh. Updated March 9, 2020. Accessed April 28, 2020, https://naturalmedicines.therapeuticresearch.com/databases/food,-herbs-supplements/professional.aspx?productid=857
- Uebelhack R, Blohmer JU, Graubaum HJ, Busch R, Gruenwald J, Wernecke KD. Black cohosh and St. John's wort for climacteric complaints: a randomized trial. *Obstet Gynecol*. Feb 2006;107(2 Pt 1):247-55. doi:10.1097/01.aog.0000196504.49378.83
- 22. Befus D, Coeytaux RR, Goldstein KM, et al. Management of menopause symptoms with acupuncture: an umbrella systematic review and meta-analysis. *J Altern Complement Med*. Apr 2018;24(4):314-323. doi:10.1089/acm.2016.0408
- 23. Chiu HY, Hsieh YJ, Tsai PS. Acupuncture to reduce sleep disturbances in perimenopausal and postmenopausal women: a systematic review and meta-analysis. *Obstet Gynecol*. Mar 2016;127(3):507-15. doi:10.1097/aog.000000000001268
- Goldstein KM, Shepherd-Banigan M, Coeytaux RR, et al. Use of mindfulness, meditation and relaxation to treat vasomotor symptoms. *Climacteric*. Apr 2017;20(2):178-182. doi:10.1080/13697137.2017.1283685
- 25. Wang Y, Shan W, Li Q, Yang N, Shan W. Tai Chi exercise for the quality of life in a perimenopausal women organization: a systematic review. *Worldviews Evid Based Nurs*. Aug 2017;14(4):294-305. doi:10.1111/wvn.12234
- Rindfleisch JA. Passport to Whole Health: A Personal Health Planning Reference Manual. http://projects.hsl.wisc.edu/SERVICE/key-resources/PDF%20Passport%20to%20Whole%20Health%20FINAL%2011-10-16.pdf
- 27. Vo B, Kolahi A, Craemer E, Wilkinson J. Menopause. Updated May 31, 2019. Accessed April 28, 2020, https://www-essentialevidenceplus-com.ezproxy.library.wisc.edu/content/eee/241#accept
- 28. Hill DA, Crider M, Hill SR. Hormone therapy and other treatments for symptoms of menopause. *Am Fam Physician*. Dec 1 2016;94(11):884-889.