### Perimenopause/ Menopause Experience

**Related definitions (source: World Health Organization {WHO})**:

- **Menopause**: the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. Natural menopause is recognized to have occurred after 12 consecutive months of amenorrhea; this occurs with the final menstrual period (FMP), known with certainty only in retrospect one year or more after the event (induced menopause is defined as surgical removal of both ovaries or iatrogenic ablation of ovarian function). Average age of onset is 51 years.
- **Perimenopause**: includes the period immediately prior to menopause and the first year after menopause (defined as 2-8 years prior to menopause).
- **Menopausal transition**: the time before the FMP when variability in the menstrual cycle is usually increased.
- **Postmenopause**: the period of time dating from the FMP, regardless of whether the menopause was induced or natural/spontaneous.

Age at perimenopause/menopause is estimated from several U.S. studies, most recently from the population-based Massachusetts Women’s Health Study (MWHS)^2. Factors that affect age at menopause include:

- **Smoking**: smokers tend to experience menopause 2 years earlier than non-smokers.
- **Nulliparity**: women who have not had children have a tendency to have an earlier menopause.
- **Family history**: a woman's age at menopause is often similar to her mother's age at menopause.
- **Other** possible factors include: type 1 diabetes and shorter cycles during adolescence.
- By age 55, > 90% of women have experienced menopause^3.

### Perimenopause Experience

First changes noted are shorter menstrual cycles^4:

- At age 20 average cycle is 28.8 days.
- At age 30 average cycle is 27.2 days.
- At 9 years prior to menopause, average cycle is 25.6 days.

Hot flashes are common in perimenopause:

- Can begin several years prior to menopause.
- Often peak at menopause and then subside.
- Average duration is 3-5 years, but can be much longer.

Ovulation is erratic; can lead to a wide range of menstrual patterns:

- The following gynecologic pathology are also prevalent at this age and can cause abnormal uterine bleeding:
  - Fibroids,
  - Polyps, and
  - Endometrial hyperplasia (less frequently).

Hormone levels fluctuate widely; not useful in diagnosing where women are in perimenopause.

- Normal FSH in women with symptoms such as hot flashes and menstrual irregularities does not rule out perimenopause.

Menopause is known in retrospect only after absence of a period for > 1 year.
**Components of Effective Counseling**

- Exposure to counseling:
  - Initiate discussions concerning disease prevention and management of menopausal symptoms
  - Provide educational materials detailing treatment options

- Breadth of counseling:
  - Provide current evidence regarding benefits and risks of pharmacologic agents and alternative therapies for disease prevention and symptom management

- Personalization of counseling:
  - Personalize discussions based on patient and family history
  - Consider patient preferences, values, and key concerns

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**Unintended Pregnancy**

Pregnancy rate in women >40 years old is low, but approximately 51% of these pregnancies are unintended. Perimenopausal and early postmenopausal women are potentially able to conceive.

- Low-dose oral contraceptives:
  - Protect against pregnancy and relieve estrogen-related menopausal symptoms (e.g., reduce menstrual cycle irregularity).
  - Are considered safe (several studies actually indicate protective effect regarding both breast and ovarian cancer) and effective during perimenopause (reduce menorrhagia, decrease risk of functional ovarian cysts).
  - Possibly increase bone density (ACOG).

**Perimenopausal/Postmenopausal Symptoms**

Numerous symptoms have been attributed to menopause; with the exception of menstrual cycle changes, vasomotor symptoms, and vaginal dryness, most have been found to be unrelated to menopause in Canadian and Norwegian studies.

- Healthy midlife women may experience somatic and neuromuscular symptoms as well as mood changes, none of which are exclusive to perimenopause.

- Menstrual cycle changes (see page 1)

- Vasomotor symptoms:
  - Experienced by up to 85% of women.
  - Include hot flashes, day sweats, night sweats.
  - Last an average of 3–5 years; can start prior to last period and continue indefinitely.

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**Urogenital changes:**

- Vaginal dryness
  - Vaginal lining becomes thin and dry.
  - Painful intercourse and vaginal infections.
- Urinary tract infections (UTIs):
  - Recurrent UTI linked to estrogen deficiency.
  - More common in postmenopausal than perimenopausal women.
  - Decreased by intravaginal estrogen.
- Sexual function:
  - Decrease in sexual function due to several factors including:
    - Decrease in estrogen to clitoral and vulvar area resulting in decreased blood flow and neuropathy.
    - Dryness and dyspareunia from vaginal atrophy.
    - Decrease in androgen production, which occurs postmenopause, may result in decrease in libido.
    - Studies of androgen replacement show conflicting results.

**Insomnia:**

- May be partially related to vasomotor symptoms: women with hot flashes found to have twice the rate of insomnia as women without them.
- HRT improves sleep quality and reduces time to fall asleep (sleep latency).
- Should not be attributed to menopause without consideration of other etiologies.

**Depression:**

- Current evidence does not support a correlation between estrogen levels during perimenopause and major depressive disorder. In population-based studies, 23% of women report depressed mood.
- Best predictor of depression during perimenopause is prior depression.

Other factors associated with distress over menopausal symptoms:

- Stress exposure.
- Negative attitudes toward menopause and aging.
- Previous premenstrual symptoms.

Most studies of menopausal women are culturally limited.

- There is some evidence that menopausal symptoms are culture-bound.

- In the SWAN study, a multi-cultural study of greater than 16,000 women:
  - Asian (Japanese and Chinese) women reported experiencing hot flashes/night sweats with significantly less frequency than did women of other ethnic backgrounds (African American, Caucasian, Hispanic).
  - Asian women also reported vaginal dryness with less frequency.
  - Analysis not yet complete, but suggests that variation in dietary intake of soy/phytoestrogens (higher among Asian women) may contribute to infrequent reporting of vasomotor symptoms.
**Components of Effective Counseling (cont’d)**

Ensure follow up:
- If a therapy is chosen, agree upon goals
- Ensure follow-up to address effectiveness and compliance

*Though the HEDIS Management of Menopause measure has been temporarily suspended for revision and simplification, HPHC considers these counseling topics and components (e.g., vasomotor symptoms and vaginal dryness, which are known to be estrogen-related) to comprise appropriate care for menopausal patients.

**Recommendations**

**Assess Menopausal Status and/or Ovarian Function**
- If still menstruating (whether skipping, experiencing some other irregularities, or having recently ceased menstruating [within previous 6 months]), consider/exclude pregnancy.
- Cannot rely on FSH level, may be inconclusive:
  - Elevated FSH level confirms ovarian aging and dysfunction, but normal FSH level does not exclude perimenopause.
  - Measurement of LH unnecessary.
  - Consider/exclude premature ovarian failure.
- If symptoms secondary to estrogen deficiency (hot flashes, vaginal dryness, dyspareunia, UTIs), and/or symptoms possibly due to estrogen deficiency secondary to perimenopause (e.g., irritability, sleep disturbance, dry skin) are present:
  - Tailor treatment to symptoms, menopausal status (perimenopause or postmenopause), and patient preference.
- See *Common Therapies for Symptom Management: Perimenopause and Menopause.*
- If symptoms of depression are present, evaluate and treat as appropriate or refer to mental health, regardless of menopausal status.

**If Postmenopausal (no menses > 12 months)**
- If menopausal symptoms are present, consider above recommendations.
- If HRT used for treatment of menopausal symptoms, use lowest possible effective dose for shortest duration of time.
  - **NB: Use of HRT indicated only early in menopause for treatment of menopausal symptoms.**
- If counseling regarding disease prevention:
  - Assess risk for osteoporosis, breast cancer, CHD*.
  - Consider BMD testing *if results will influence treatment decision* **:**
    - < age 65: screen if one or more risk factors present other than postmenopausal status;
    - >= age 65: screen all women routinely.
  - Tailor counseling and treatment to patient-specific risks/benefits, established prevalence of diseases, and known effectiveness of available treatments.
  - See *Common Therapies for Symptom Management: Perimenopause and Menopause.*

* Based on the following, HRT should not be recommended for disease prevention:
  - 1998 Heart and Estrogen/Progestin Replacement Study (HERS): showed an increased risk of CHD event in the first year of HRT use in women with CHD; extended follow-up for 6.8 years, 2002 HERS II, indicates no overall benefit.
  - 2002 Women’s Health Initiative Study (WHI): women on Prempro (0.625 mg conjugated equine estrogen, plus 2.5 mg medroxyprogesterone acetate) experienced an increased risk of heart attack, stroke, breast cancer and thromboembolic events vs. women randomized to placebo. This arm halted prematurely at 5.2 years due to increased breast cancer risk.

** BMD recommendations are consistent with, though not exactly the same as, 2002 U.S. Primary Services Task Force (U.S.P.S.T.F.) recommendations.** In women age > 65 years, hip BMD yields the most reliable result, vs. spine, etc. (stronger predictor of hip fracture; unaffected by degenerative arthritis).
References