PREMENSTRUAL DYSPHORIC DISORDER (Premenstrual Syndrome)

DSM-IV
Premenstrual dysphoric disorder (provided for further study)

Recommended for further systematic clinical study and research, Premenstrual Dysphoric Disorder (popularly called PMS) is characterized by multiple symptom clusters occurring during the menstrual cycle, becoming progressively disabling. Some research suggests these symptoms may be a delayed effect of hormonal changes earlier in the menstrual cycle, or the result of an independent cyclical mood disorder that is synchronized with the menstrual cycle. Although the physical symptoms produce discomfort, the mood change or premenstrual negative affect symptoms are often more distressing, interfering with familial, social, and work-related activities. The condition usually improves after the onset of menses; however, for some women, symptoms persist through and after menses. The symptoms cannot result solely from cyclic or environmental stress but may be enhanced by these stressors. This diagnosis is not used when the person is experiencing a late luteal phase exacerbation of another disorder, such as major depression, panic disorder, or dysthymia.

ETIOLOGICAL THEORIES

Psychodynamics

Although etiology is not understood, symptoms are believed to be related to the interaction of psychological, social, and biological factors. Underlying personality and psychiatric conditions contribute to how any particular individual deals with these physical problems. An individual’s past and present negative attitudes toward menstruation are likely to influence the symptomatology of Premenstrual Dysphoric Disorder. Emotion is the result of complex interactions between hormonal changes and cognitive variables. Hormonal changes during the menstrual cycle are likely to increase the female’s susceptibility to negative psychological experiences rather than to cause such experiences.

Biological

Although not completely understood, it may be related to the alterations (fluctuations) in estrogen and progesterone and the fluid-retaining action of estrogen during the menstrual cycle. Estrogen excess/deficiency, progesterone deficiency, vitamin deficiency, hypoglycemia, and fluid retention have all been proposed to contribute to Premenstrual Dysphoric Disorder. In addition, levels of androgen, adrenal hormones, and prolactin have been hypothesized to be important in the etiology of this syndrome. Finally, an increase in prostaglandins secreted by the uterine musculature has been implicated in accounting for the pain associated with this disorder.

Family Dynamics

The behaviors associated with this disorder may be learned through modeling during the socialization process. Children may observe and identify with this behavior in significant adults and incorporate it into their own responses as they grow up. Positive reinforcement in the form of primary or secondary gains for these behaviors may perpetuate the learned patterns of disability.

CLIENT ASSESSMENT DATA BASE

Activity/Rest
Decreased interest in usual activities; lack of regular exercise
Sleep disorders (hypersomnia, insomnia)
Fatigue, lethargy; restlessness
Circulation
Heart pounding/palpitations
Increased sweating/diaphoresis

Ego Integrity
Changes in body image (e.g., feeling fat, ugly)
Anxiety, feelings of being unable to cope, sense of loss of control/powerlessness
Mood swings; irritability, frustration, crying spells

Elimination
Urinary frequency or retention, oliguria; recurrent cystitis
Constipation; diarrhea

Food/Fluid
Increased appetite/food craving (e.g., sugar)
Nausea, vomiting
Poor nutritional habits; overeating
Difficulty maintaining a stable weight/transient weight gain
Abdominal bloating
Swelling of extremities, generalized edema

Neurosensory
Headaches (classic migraine)
Dizziness or fainting, vertigo, syncope
Paresthesias of extremities; trembling
Visual disturbances; ringing in ears
Aggravation of seizure activity

Mental Status
Decreased concentration, forgetfulness, confusion
Sense of depersonalization
Nervous tension, impatience, anger, hostility, aggressiveness
Personality changes (mood swings) not unlike Jekyll and Hyde (e.g., feeling happy or serene during the follicular phase of the menstrual cycle and tense, irritable, and depressed beginning any time in the luteal phase but primarily during the last week), occurring during most menstrual cycles and ceasing at the onset of the menstrual period
Irrational thought processes involving guilt or suicide

Pain/Discomfort
Abdominal cramping
Breast tenderness, joint and muscle stiffness/pain, backache

Respiration
Nasal congestion
Hoarseness
Aggravation of asthmatic episodes
Safety
Skin changes: acne, neurodermatitis; easy bruising
Conjunctivitis
Suicidal ideation/Attempts

Sexuality
Intolerance or multiple side effects to birth control pills (however, a small percentage of women report improvement in condition)
Breast swelling
Changes in sexual drive
History of pregnancy-induced hypertension

Social Interactions
Interference with the quality of life (home, social, and work)
Difficulty with relationships
Nagging behavior/Interactions

Teaching/Learning
Age of onset may be any time after menarche but may not be noticeable until the 20s (may not seek treatment until 30s or 40s, when the symptoms worsen)
May have close female relative(s) with similar problems
Alcohol/Other drug intolerance or addictions

DIAGNOSTIC STUDIES
As indicated by individual situation, dependent on age, medication, therapy, family history, and symptomatology and may include testing to rule out general medical conditions that may present with dysphoria and fatigue exacerbated during the premenstrual period (e.g., seizure disorders, thyroid/other endocrine disorders, cancer, systemic lupus erythematosus, anemias, endometriosis, and various infectious processes).
Measurement of Circulating Reproductive Hormones and/or Daily Self-Rating: Determines the timing of luteal and follicular phases in women who have had a subtotal hysterectomy.
Serum Progesterone and Estradiol 17 (Midluteal Phase): Assesses inadequate luteal phase.
Serum Prolactin and TSH: Rules out pituitary/thyroid abnormalities in client with galactorrhea.
Adrenal Suppression Test: Locates source of androgen excess and serves as a guide for therapy for clients with hirsutism.
Abraham Menstrual System Questionnaire (MSQ), the Dalton Diagnostic Checklist (or Similar Premenstrual Symptoms Worksheet), and Calendar of Premenstrual Symptoms (Minimum 2 Months): Self-reporting tools to determine cycles of symptoms and degree of impairment.
Psychological Assessment: Minnesota Multiphasic Personality Inventory (MMPI) administered twice—once during the follicular phase of the menstrual cycle and again during the luteal phase (preferably the client’s most critical day) of the menstrual cycle to identify psychological components and degree of impairment.

NURSING PRIORITIES
1. Provide emotional support and relief of symptoms.
2. Present information about condition/healthcare needs and resources.
3. Encourage adoption of a lifestyle promoting health and diminishing premenstrual symptoms.
DISCHARGE GOALS
1. Assertive behavior/stress-management techniques used to manage problems.
2. PMS condition understood and sources for assistance are identified.
3. Lifestyle changes to promote health/diminish symptoms implemented.
4. Family/SO participating in treatment process.
5. Plan in place to meet needs after discharge.

NURSING DIAGNOSIS

<table>
<thead>
<tr>
<th>ANXIETY [moderate to panic]</th>
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<tbody>
<tr>
<td>Cyclic changes in female hormones affecting other systems</td>
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<tr>
<td>Increased tension; apprehension, jitteriness</td>
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<tr>
<td>Impaired functioning, feelings of inability to cope/loss of control; depersonalization</td>
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<td>Somatic complaints</td>
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May Be Related to: Cyclic changes in female hormones affecting other systems
Possibly Evidenced by: Increased tension; apprehension, jitteriness
                      Impaired functioning, feelings of inability to cope/loss of control; depersonalization
                      Somatic complaints

Desired Outcomes/Evaluation Criteria—
Verbalize awareness of feelings of anxiety.
Client Will: Identify healthy ways to deal with feelings.
            Appear relaxed and report anxiety is reduced to a manageable level.
            Use resources/support systems effectively.

ACTIONS/INTERVENTIONS

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<tr>
<td>Degree to which this disorder is affecting life will indicate need for/type of intervention.</td>
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<td>Identifies established patterns of symptoms, allowing for proactive intervention to break cycle of increasing irritability, muscle tension, and escalating feelings of anxiety.</td>
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<td>Joint evaluation of all the data, noting the interaction between life stress and premenstrual symptoms, is essential to making a correct diagnosis and developing an appropriate treatment program.</td>
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<tr>
<td>Listening to the client promotes feelings of worthwhileness and normalcy, thereby reducing anxiety.</td>
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<tr>
<td>Guided therapeutic writing helps client become more in tune with own body/responses, enhancing ability to intervene/control situation.</td>
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Independent
Assess level of anxiety and degree of interference with daily activities/interpersonal relationships.
Review history and have client maintain a premenstrual symptom calendar, noting occurrence of nervous tension, mood swings, irritability, and anxiety.
Review with client the premenstrual worksheet, confidential personal data sheets, and Life Events Stress Scale.
Encourage client to acknowledge and express feelings, accepting client’s perception of the situation.
Have client keep a diary of feelings and precipitating factors.
Demonstrate/encourage use of stress-reduction techniques, relaxation and visualization skills. Enhances ability to relax and flow with the discomfort/pain, provides sense of control, and helps to reduce anxiety.

Recommend involvement in regular aerobic exercise program such as fast walking, jogging, dancing as individually appropriate. Provides outlet for tension and promotes release of endorphins, which improve mood and increases sense of general well-being. Note: Exercise therapy need not be intensive to achieve desired effect.

Help client use anxiety to promote understanding and deal with situation. A moderate degree of anxiety can be helpful to heighten awareness, and when client learns to use this, problem-solving can be enhanced.

Identify helpful resources/people (e.g., physicians, nurse practitioners/clinicians, psychiatrist/psychologist, lay support groups). Professionals who specialize in this disorder can assist client to accept self-feelings as reality-based and begin to identify necessary lifestyle changes.

**Collaborative**

Administer medications, as indicated:
- Antianxiety, e.g., alprazolam (Xanax), diazepam (Valium);
- B complex vitamins, especially B6;
- Calcium carbonate (Os-Cal, Titrilac).

May be used for short-term control of anxiety. Dose may be increased as necessary to prevent panic attacks during the luteal phase. Helpful in reducing feelings of irritability, fatigue, anxiety, and depression. Recent investigational study suggests that most women experience significant reduction in pain and emotional symptoms while using this product.

Refer client who does not respond to treatment regimen within 3 months for further evaluation of premature menopause, hypoglycemia, diabetes, hypothyroidism, polycystic ovaries, and ovarian failure, as indicated. Although 1/3 of clients seeking treatment respond to an initial multifaceted, nonhormonal treatment regimen within 3 months, it is important to rule out hormonal abnormalities, as the client will respond best to treatment for specific need.

**NURSING DIAGNOSIS**

**PAIN, chronic**

**May Be Related to:**
- Changes in estrogen/progesterone levels; increased secretion of prostaglandins
- Vitamin deficiency; hypoglycemia
- Fluid retention

**Possibly Evidenced by:**
- Reports of headache, breast tenderness; lower abdominal pain, backache
- Nervousness and irritability; changes in sleep patterns
- Physical and social withdrawal
**Desired Outcomes/Evaluations Criteria**

**Client Will:**
- Initiate individually appropriate lifestyle changes.
- Verbalize relief from pain/discomforts associated with condition.
- Actively engage in routine ADLs and social activities.

**ACTIONS/INTERVENTIONS**

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<td>Note and record type, duration, and intensity of pain.</td>
<td>Determination of the characteristics of pain is necessary to formulate an accurate plan.</td>
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<tr>
<td>Recommend comfort measures (e.g., back rub, warm bath, heating pad) with a matter-of-fact approach that does not provide added attention to the pain behavior.</td>
<td>May serve to provide some temporary relief of pain. Secondary gains from solicitous response may provide nontherapeutic reinforcement to the behavior.</td>
</tr>
<tr>
<td>Encourage adequate rest and sleep. Recommend avoiding stressful activity during the premenstrual period.</td>
<td>Fatigue exaggerates associated symptoms. Stress elicits heightened symptoms of anxiety during this period, affecting perception of pain.</td>
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<tr>
<td>Discuss/demonstrate with activities and techniques that distract from focus on self and pain, such as visual or auditory distractions, guided imagery, breathing exercises, massage, application of heat or cold, and other relaxation techniques.</td>
<td>Use of techniques described may help to reduce muscle tension, refocus attention, and provide a sense of control, thus preventing the discomfort from becoming disabling.</td>
</tr>
<tr>
<td>Provide positive reinforcement for times when client is not focusing on self and personal discomfort and is functioning independently.</td>
<td>May encourage repetition of desired independent behaviors while eliminating the secondary gain of dependency for the client.</td>
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<tr>
<td>Support use of biofeedback techniques.</td>
<td>May be useful in relieving tension and reducing severity of headaches.</td>
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**Collaborative**

Provide medication as indicated:

- **Premsyn PMS;**

- **Diuretics,** e.g., hydrochlorothiazide (Esidrix, HydroDIURIL), furosemide (Lasix);

- **Nonsteroidal antiinflammatory agents,** e.g., ibuprofen (Motrin);

When other measures are insufficient to bring about relief, symptomatic drug therapy may be necessary/useful. Nonprescription drug containing acetaminophen (for pain relief), pyrilamine (antihistamine for relief of tension, cramps, and irritability), and pamabrom (a mild potassium-sparing diuretic for water related symptoms), which has been effective in treating mild to moderate PMS. Provides relief from discomfort of bloating and edema when fluid retention is extreme and does not respond to other measures (e.g., diet and sodium restriction). May be effective for relief of pain due to increased prostaglandin secretion.
Propranolol (Inderal), naproxen (Naprosyn); May be used for prophylactic treatment of migraine.

Muscle relaxants, diazepam (Valium); Useful in relieving severe muscular tension.

Bromocriptin (Parlodel); Although studies do not show clear benefit, some women report control of pain of mastodynia and other premenstrual symptoms that may be caused by elevated prolactin, although side effects (especially nausea) may preclude use in some clients.

Vitamin E supplement; May reduce breast tenderness.

Sumatriptan (Imitrex). Highly effective in the treatment of acute migraine attack.

NURSING DIAGNOSIS

COPING, INDIVIDUAL, ineffective

May Be Related to:

Personal vulnerability; threat to self-concept

Multiple stressors (premenstrual symptoms) repeated over period of time

Poor nutrition

Work overload, lack of leisure activities

Possibly Evidenced by:

Verbalization of difficulty coping/problem-solving or inability to ask for help

Emotional/muscular tension; chronic fatigue, insomnia; lack of appetite or overeating

High illness rate

Inability to meet role expectations; alteration in societal participation

Desired Outcomes/Evaluation Criteria—Client Will:

Identify ineffective coping behaviors and consequences.

Meet psychological needs as evidenced by appropriate expression of feelings, identification of options, and use of resources.

Participate in ongoing treatment program.

ACTIONS/INTERVENTIONS

Independent

Assess current functional level/coping ability, noting substance use, smoking habits, eating patterns.

Identifies needs and appropriate interventions for individual situation.
Note understanding of current situation and previous methods of dealing with life problems.

Provides information about how the client views what is happening and provides opportunity for her to look at previous methods of coping that may be helpful now.

Determine effect(s) of problem on client’s relationships/family. Include partner/SOs in process, as appropriate.

Destructive impact of symptoms can seriously undermine family systems, resulting in alienation, divorce. Including family promotes open communication and provides opportunity for increased understanding and problem-solving.

Identify extent of feelings and situations when loss of control occurs. Discuss/problem-solve behaviors to protect self/others (e.g., call support person, remove self from situation).

Recognition of potential for harm to self/others and development of plan enables client to take effective actions to meet safety needs.

Discuss importance of learning new coping strategies and developing more supportive relationships.

Realization that past behaviors have contributed to current situation/lack of support may provide impetus for change.

Encourage client to reduce or shift workload and social activities during the premenstrual period as part of a total stress-management program.

Coping realistically with life stresses, and reducing responsibility may relieve stress and therefore help relieve symptoms.

Have client identify most troublesome symptoms, which may persist after initial therapy trials.

If other measures are inadequate/unsuccessful, pharmacologic treatment may be needed to enhance coping abilities.

Collaborative

Review psychological assessments such as MMPI and clinical interview. (First MMPI should be taken during the follicular phase, second during the most critical day of the luteal phase.)

MMPI results can show very different patterns of emotional and personality functioning between those two phases. Evaluation of these tests can determine the difference in emotional overlay and psychological functioning. Consideration of these results is essential to an accurate picture of an individual’s dynamics, coping skills, and stresses, which play such a significant role in this problem.

Provide counseling with review of previous month’s diary, evaluating symptoms and effects of therapy, as well as client relationship(s).

This opportunity for assessing ongoing problems and making needed changes helps both client and nurse to know whether program is successful.

Administer medications as indicated, e.g.

Hormonal manipulation: oral contraceptive, progesterone vaginal suppositories or injections;

May be useful for some clients to relieve premenstrual symptoms when nonpharmacological measures have not been effective.

Tricyclic antidepressants: amitriptyline (Elavil);

Used for depression that does not respond as other symptoms are resolved.
Prostaglandin inhibitors: NSAIDs (e.g., Motrin), steroids; Lithium carbonate (Eskalith); Gonadotropin-releasing hormone agonist (GnRHa): nafarelin (Synarel).

- Relieves dysmenorrhea.
- May be used in the presence of affective lability when other treatments have not been successful.
- GnRHa has recently been shown to help some women with severe symptoms. Therapy is expensive and extreme. Estrogen and progesterone therapy must be implemented to allow safe use of GnRHa regimen.

Encourage participation in support group, psychotherapy, marital counseling on a regular basis.

- May help client/family members learn effective coping strategies and support indicated lifestyle changes.

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<thead>
<tr>
<th>NURSING DIAGNOSIS</th>
<th>KNOWLEDGE deficit [LEARNING NEED] regarding condition, prognosis, self care and treatment needs</th>
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<tbody>
<tr>
<td>May Be Related to:</td>
<td>Lack of exposure to, misinterpretation of/unfamiliarity with resources</td>
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<td></td>
<td>Inaccurate/incomplete information presented</td>
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<tr>
<td>Possibly Evidenced by:</td>
<td>Verbalization of the problem; request for information; statement of misconception</td>
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<td>Inappropriate or exaggerated behaviors (e.g., hysterical, hostile, agitated)</td>
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<td></td>
<td>Exacerbation of symptoms</td>
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<td>Assume responsibility for own learning, begin to look for information and ask questions.</td>
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<td></td>
<td>Initiate necessary lifestyle changes.</td>
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<td>Participate in ongoing treatment regimen.</td>
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<tr>
<td>Determine client’s/SO’s knowledge of PMS and misconceptions about condition.</td>
<td>Identifies individual needs and provides opportunity to clarify misunderstandings.</td>
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<tr>
<td>Provide written and verbal information about condition.</td>
<td>Provides different methods for accessing/reinforcing information and enhances opportunity for learning/understanding.</td>
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<tr>
<td>Encourage client to limit/stop smoking.</td>
<td>Smoking decreases the absorption of vitamins and may sustain PMS symptoms.</td>
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<tr>
<td>Action</td>
<td>Detail</td>
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<tr>
<td>Suggest participation in regular exercise program.</td>
<td>Exercise therapy increases the release of certain neurotransmitters in the brain (endorphins) that are important in regulation mood.</td>
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<tr>
<td>Encourage client to do breast self-exam regularly.</td>
<td>Although this is important for <em>all</em> women to perform, clients with PMS may have a higher incidence of breast cancer.</td>
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<td>Demonstrate procedure and provide instructional brochure.</td>
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<tr>
<td>Review medication regimen, importance of followup visits to healthcare provider.</td>
<td>Understanding enhances cooperation and promotes ongoing evaluation/adjustment of treatment program.</td>
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<tr>
<td>Suggest client continue diary activity, recording symptoms and interventions used, and response.</td>
<td>Useful in determining effectiveness of therapy/need for change.</td>
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<tr>
<td>Have client keep a nutritional survey/record entire food and liquid intake for 3 months.</td>
<td>Assists in determining whether the client’s diet is a contributing/aggravating factor. (Commercial computer analysis may be available for interpretation of the survey.)</td>
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<tr>
<td>Discuss recommended diet plan, e.g.,</td>
<td>Beginning an early self-help program may relieve clinical symptoms and encourage the client emotionally.</td>
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<tr>
<td>Limit red meat to 3 ounces/day, reduce intake of fats, especially saturated fats;</td>
<td>Decreases arachidonic acid, which helps balance PGE₃ (“good”) with PGE₂ (“bad”) prostaglandin, improving many premenstrual symptoms.</td>
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<tr>
<td>Limit dairy products to 2 servings a day;</td>
<td>Excessive dairy products block the absorption of magnesium.</td>
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<tr>
<td>Increase intake of complex carbohydrates (vegetables, legumes, cereals, and whole grains) and foods containing linoleic acid (e.g., safflower oil);</td>
<td>Stimulates insulin release in a less abrupt and more sustained manner. Although the value of linoleic acid has not been proven, some women have found it to be helpful for the relief of PMS symptoms.</td>
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<tr>
<td>Decrease intake of refined and simple sugars;</td>
<td>Reduces possibility of rapid release of insulin, which could lower blood sugar and initiate craving for sweets, thus creating a vicious cycle. Additionally, excess sugar is thought to cause nervous tension, palpitations, headache, dizziness, drowsiness, and excretion of magnesium in the urine, thus preventing the body from breaking down sugar for energy.</td>
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<tr>
<td>Decrease salt intake to below 3 g/day, but not less than 0.5 g/day;</td>
<td>Insulin prevents the kidneys from excreting salt; however, too little salt stimulates norepinephrine and causes sleep disturbances. Salt restriction also prevents edema.</td>
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<tr>
<td>Limit intake of methylxanthines (coffee and chocolate) and alcohol (1 or 2 drinks a week).</td>
<td>These substances can increase breast tenderness, pain, and may negate the therapeutic effect of vitamins. Alcohol can cause reactive hypoglycemia and fluid retention, and may be the biggest reason for treatment failure.</td>
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<tr>
<td>Review need for complete vitamin therapy program, such as Optivite.</td>
<td>Women with this disorder tend to eat more junk food and to be too busy to eat a well-balanced diet; therefore, the client may be deficient in vitamins and minerals, which act as cofactors in a number of chemical reactions in the body and are involved in making, using, and excreting hormones.</td>
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</table>
Refer to available support groups/research centers. Provides additional resources to understand and deal with condition.