Stress and Stress Management

WWW.RN.ORG®
Reviewed February 2024, Expires February 2026
Provider Information and Specifics available on our Website

By Wanda Lockwood, RN, BA, MA

Purpose

The purpose of this course is to describe the different types of stress, theories about stress, effects of stress, maladaptive processes, and stress management techniques.

Goals

Upon completion of this course, the healthcare provider should be able to:

- Describe 3 types of stress.
- Describe 3 theories about stress.
- Describe 3 stages of the general adaptation syndrome.
- Describe 3 personality characteristics that determine response to stress.
- Discuss the 3 processes of cognitive appraisal.
- List and describe at least 5 different types of stressors.
- Discuss the physiological response to stress.
- Discuss diseases of adaptation and list at least 6.
- Describe at least 10 symptoms associated with stress.
- Discuss the 4 levels of anxiety.
- Describe at least 4 mental processes that affect response to stress.
- Describe at least 5 elements of a healthy lifestyle.
- Describe at least 5 coping strategies.
- List 2 types of medications used to treat stress.
- Describe at least 4 relaxation techniques.

Introduction

Wikimedia Commons

Anxiety and stress are interrelated because anxiety is a normal response to stress. Anxiety is an apprehensive state characterized by feelings of dread in response to internal or external stimuli. Stress occurs when the person perceives a challenging or threatening change that brings about disequilibrium because the person is unable to adequately adapt to the change. Over time, anxiety can lead to depression.

The American Psychological Association describes 3 different types of stress:

- **Acute**: This is the most common type of stress and is short term, such as hurrying to meet a deadline, and if it occurs infrequently causes little problem. However, if acute stress happens frequently, it can cause psychological and physical distress.
- **Episodic acute:** This is repetitive short-term acute stress, such as the person who always runs late for work and appointments or never completes assignments or tasks on time. These people are in a constant state of arousal and anxiety.
- **Chronic:** This type of stress lacks the ups and downs of emotions associated with more acute stress, but it is a constant weight that burdens people and results in anxiety and depression and difficulty coping.

Theories

Research into the causes and effects of stress has been influenced by 3 theories about stress:

- Selye theorized that stress is a response to an environmental (emotional or physical) demand or stressor.
- Holmes, Rahe, and Masuda considered stress as a response to a stimulus, such as life changes.
- Lazarus theorized that stress results from an interaction or transaction between the person and the environment.

These theories are not mutually exclusive, but each adds a different dimension to the understanding of stress. The key is that the stressor requires the person to adapt and causes physiological changes, regardless of the type of stress. Because of this, stress plays an important role in both physical and emotional health.

Stress Response

According to Selye, change that results in stress is a stressor. This theory views ALL change as stressors. Thus, stressors can be emotional or physical, pleasant or unpleasant:

- **Emotional:** Marriage or divorce, illness, financial loss or gain, academic failure or success, grief.
- **Physical:** hypothermia or hyperthermia, pain, noise, burns, injuries or recovery, infections, exercise.

Regardless of the type of stress, the physical responses are similar.

Selye referred to these responses as the **general adaptation syndrome**, which has 3 stages:

Alarm	A stressor initiates the "flight or flight" response of the sympathetic nervous system. If the stressor is severe or prolonged, the body attempts to adapt through physiological changes, which lower resistance. The physiological responses are not under the control of the person as the sympathetic nervous system responds to stress and anxiety. The hypothalamus stimulates the pituitary gland to secrete hormones to stimulate glands to increase production of adrenaline and cortisol. Hormones stimulate the liver to convert glycogen stores to glucose to increase the rate of metabolism.

Resistance	Physical, emotional, and external resources mobilize to increase resistance to stress and to adapt: • Blood flow to the GI tract decreases, resulting in decreased appetite, nausea, and decreased intestinal motility • Reflex time increases, so muscles may twitch or shake. • Insomnia may occur as sleep needs decrease. • Restlessness occurs and may be associated with uncontrolled muscle activity and startling. • Speech quickens. • Sweat glands increase production and the skin may flush or itch. • Cognitive functioning may be impaired so the person appears confused or makes errors in judgment. • Some people experience flashbacks or hallucinations. • Heart rate, respiratory rate, and blood pressure increases. • Pupils dilate. If the person adapts to the stress, the body responses return to normal
Exhaustion	If the person is unable to adapt to stress or becomes overwhelmed, all energy for adaptation may be expended. A continual state of physiologic arousal may occur without resolution.

The reality is that people's responses are not always so predictable as Selye's model, based on animal studies, suggests. People tend to respond to the same stress in different ways. There are also gender differences, so stress can produce different complex hormonal and immunologic changes in different individuals, making some people more at risk for disorders of adaptation than others. People also may respond differently to acute and chronic or episodic stress.

In some individuals the parasympathetic nervous system dominates during stress, often resulting in the opposite effect of the sympathetic nervous system response. Cardiovascular responses can include decreased blood pressure and heart rate, feelings of faintness or actual fainting. There can also be an increased need to urinate along with feelings of abdominal pain, nausea, and diarrhea.

Stimulus response

The theory that views stress as a response to stimulus focuses on life events that produce changes in life

patterns. This theory attempts to quantify and weigh life events (positive and negative) to help to determine the degree of stress they may engender.

A number of different scales have been devised, including the Social Readjustment Rating Scale (SRRS), the Schedule of Recent Experiences (SRE), and the Life Experience Survey (LSE). For example, the SRRS has 5 categories of life events (health, work, home and family, personal and social, and financial). Each category contains 5 to 30 events with a life change unit (numerical value) assigned to each event that has occurred in the person's life.

SRRS Sample:

Health	
An injury or illness that kept the person in bed for a week or more or resulted in hospitalization	74
Major dental work	26
Work	
Change to a new type of work	51
Trouble with boss	29
Home and family	
Change in residence in same city	25
Marriage	50
Divorce	90
Personal and Social	
Beginning or ending school/college	38
Vacation	24
Financial	
Increased income	38
Decreased income	60

The units are totaled based on the previous 6 months or previous year. Six-month total ≥300 or 1-year total ≥1000 indicates high recent life stress.

This theory assigns a specific degree of stress for each event and does not consider personal perceptions. While research has demonstrated an association between the number and intensity of life events and emotional and physical illness, the association is sometimes weak, and a number of additional factors should be considered, including age, gender, health, and life experience.

Additionally, people respond in profoundly different ways to stress. Some people are able to deal with major life events and come through

relatively unscathed while others succumb. Personality characteristics help to determine a person's response to stress and mediate stress and illness:

- **Hardiness:** The person has clear personal goals, interacts with environment, and has an internal locus of control (belief in self-determination) rather than external.
- **Sense of coherence:** The person sees life as ordered, predictable, and manageable, so stressors are not perceived as threatening.
- **Resilience:** The person is resourceful, flexible, and has good problem-solving abilities.

People with hardiness, a high sense of coherence, and resilience tend to deal with stress more effectively than others.

Some researchers believe that daily ongoing stresses have more impact than major life events:

- **Daily hassles:** These include experiences/conditions in daily living that cause irritation, frustration, or distress. Examples include chronic pain, deadlines, marital problems, meal planning, traffic jams, waiting, caregiving, and job security concerns.
- **Uplifts:** These are positive experiences that may offset the stress of daily hassles.
- **Optimist/Pessimist:** People's basic disposition tends to affect their reaction to stress. Those who tend to be optimistic often exhibit better coping skills and fewer negative emotional and physical effects from stress.

Environmental Transaction

This theory focuses on the transactions that occur within a person in response to an environmental demand. The person interprets data through a process of **cognitive appraisal**, during which the person recognizes stressors and assesses resources:

The process of cognitive appraisal includes:

- **Primary appraisal:** Situations are assessed to determine if they require attention and mobilization of resources. Situations may be judged as irrelevant, benign-positive, or stressful. If the situation is stressful, then it is assessed to determine if it represents harm or loss (actual damage), threat (potential damage), or challenge (potential gain).
- **Secondary appraisal:** Costs and benefits of taking action or not are assessed as well as evaluating resources and available

options. Through the mediating process, the person attempts to resolve issues causing stress.
- **Cognitive reappraisal:** The person continuously reevaluates and reassesses.

Emotions are a central focus of this theory. The cognitive appraisal process determines whether situations are assessed as stressful. Primary and secondary appraisal can lead to stress-related emotions, which include anger, fear, anxiety, guilt, and sadness.

In this theory, different individuals will assess situations and demands from different perspectives, depending on their personal frames of reference, so what is stressful to one person will not be stressful to others.

Discussion The healthcare provider often applies all theories when assessing the effects of stress and planning management strategies. Stress is associated with the development of some disorders and exacerbations of others, so physical symptoms are often the starting point to assess the effects of stress. Then, life events as well as the daily hassles of life that may be increasing stress are evaluated as well as the personal characteristics of the individual, such as hardiness and resilience. The costs and benefits of taking action to alleviate stress should be discussed as part of management.

Common stressors	
Daily	Child care. Car trouble. Household duties. Losing/forgetting something. Oversleeping. Traffic jams. Waiting. Cooking.
Environmental	Noise. Crime. Pollution. Overcrowding. Traffic. Weather.
Family	Arguments. Child leaving/returning home.

	Lack of communication. Elder care. Illness, injury, surgery. Marriage. Move. Parenting. Divorce/separation. Pregnancy. Adoption. Sexual problems. In-law problems. Substance abuse.
Financial	Change in financial status. Fixed income. Paying alimony. Filing bankruptcy. Taxes. Debt. Retirement income.
Health	Arthritis. Poor hearing/vision. Headaches. Illness, injury, diseases. Medication problems. Impaired mobility. Obesity. Chronic pain. Sleep disorders.
Work	Downsizing/merger. Commute. Being fired/laid off. Unpleasant work environment. Static position. Increased responsibilities. Retirement. Promotion. New job. Inadequate training. Trouble with boss/co-workers. Little recognition. Excessive workload.

Physiological response to stress

The body responds physiologically to all types of stress with the hypothalamus central to both emotional and physiological responses because it activates both the sympathetic nervous response and the parasympathetic response:

- When a stressful event occurs, input is sent through the peripheral nervous system (including eyes and ears) to the cerebral cortex and activates the reticular formation in the brainstem.
- The reticular formation relays information to the thalamus and cerebral cortex through a network of neurons involved in arousal and consciousness, the reticular activating system. The RAS maintains wakefulness and alertness.
- Stimulation of the prefrontal area reduces the speed of associations to allow the person time to evaluate (primary and secondary appraisal). The temporal lobe produces fear and alters perceptions of sight and hearing.
- The limbic system mediates emotions and behavior that are necessary for survival. Endorphins are released to reduce perceptions of pain.
- The hypothalamus releases neuropeptides that activate the sympathetic nervous system, which stimulates the adrenal medulla to release catecholamines (epinephrine and norepinephrine) and corticotropin-releasing hormone (CRH), which causes the pituitary gland to release ACTH to stimulate the adrenal cortex. The adrenal cortex releases corticosteroids.
- Blood glucose levels increase in response to stimulation of the adrenal glands and skeletal muscle blood vessels dilate, cerebral blood flow increases, and blood is shunted away from the GI system. Clotting time increases to help maintain blood flow to vital organs.
- These processes inhibit the immune system.

Diseases of adaptation

The physiological changes prompted by the sympathetic nervous system response to stress serves a number of purposes:

- Increased heart rate and BP: Provides protection of internal organs by increasing perfusion.
- Increased blood glucose level: Increases breakdown of glycogen to increase available energy.
- Increased mental acuity: Makes person alert to danger.
- Dilated pupils: Increases awareness.

- Increased muscle tension: Prepares muscles for action and reduces muscle fatigue.
- Increased rate of respirations: Provides extra oxygen for energy and increased stamina.
- Increased blood coagulability: Prevents hemorrhage if trauma occurs.

While these processes probably serve a useful purpose in a more primitive or hunter-gatherer society in which people face almost constant danger, in modern society they are often destructive, resulting in diseases of adaptation, or stress-related disorders. Diseases of adaptation may develop directly because of stress or may exacerbate because of physiological responses to stress:

Angina
Asthma
Carpal tunnel syndrome
Depression
Eating disorders
Fatigue/malaise
Fibromyalgia
Headaches
Hypertension
Impotence
Insomnia
Irritable bowel syndrome
Low back pain
Myocardial infarction, cardiac disease
Peptic ulcer disease
Sexual dysfunction

Symptoms associated with stress	
GI	Dry mouth. Diarrhea. GI distress. Nausea and/or vomiting. Change in appetite.
Emotional	Depression. Fatigue. Intense anxiety. Injury-prone. Emotional lability. Nervous habits, nervous laughter. Insomnia.
CNS/ cognitive	Difficulty concentrating. Headaches. Pupil dilation.
Social/ behavioral	Urge to act out. Loss of interest in activities. Impulsiveness.

	Increased substance abuse (tobacco, drugs, alcohol)
GU/Gyn.	Changes in menstrual cycle. Urinary frequency.
Motor/ muscle/ skin	Restlessness, hyperactivity. Hyperactive startle response. Increased body tension. Tremors. Bruxism. Excess sweating. Back pain, neck pain, general muscle pain.
Cardiovascular	Palpitations. Weakness, dizziness. Hypertension.

Levels of anxiety Everyone experiences anxiety, and mild anxiety may serve a useful purpose in motivating people to act, but as anxiety becomes stronger, the resultant stress can have increasing negative effects:

- **Mild:** People may have sharpened senses with a wide perceptual field, increased motivation, and effective problem-solving and learning ability but may also experience irritability, restlessness, "butterflies," insomnia, and hypersensitivity to noise.

- **Moderate:** People have more difficulty focusing attention as perceptual field narrows to immediate task and attention is selective. People may have difficulty concentrating and may react automatically. Symptoms associated with the sympathetic nervous system (muscle tension, palpitations, dry mouth, high-pitched voice, GI upset, frequent urination, headache, diaphoresis) occur.

- **Severe:** People may be able to concentrate on only one or scattered details and cannot complete tasks or solve problems effectively. They may not be able to redirect attention and behavior is often directed toward relieving anxiety, but is usually not successful. People may appear in awe, dread, or horror and may cry out or carry out ritualistic behavior. Physical symptoms become more severe and may resemble a panic attack with severe headache, nausea, vomiting, diarrhea, trembling, rigidity, vertigo, pallor, tachycardia, and chest pain.

- **Panic:** The perceptual field focuses only on the self as environmental stimuli cannot be processed. Perceptions are distorted, and people cannot think rationally and cannot always recognize potential danger or communicate verbally. Some people may experience delusions or hallucinations and may become suicidal. People may react by bolting and running or becoming immobile and mute. The fight-flight-or-freeze response is primary.

Mental and maladaptive processes

While it's clear that both positive and negative changes cause stress, many people are not aware of the degree to which stress affects the body. Before a healthcare provider can help people deal with stress, it's important to understand how they respond to stress and the mental processes they use:

- **Expectations**: People's beliefs about what will happen affect their behavior and can become self-fulfilling prophecies. Thus, if a person loses a job and believes that he cannot find another one, he may not look for a job.

- **Mental Imagery:** People often develop mental images and internal dialogue regarding stressful situations or fears. Positive mental imagery can minimize the effects of stress, but negative mental imagery can cause negative emotional and physiological responses. For example, if a person feels she will be reprimanded at work, she may relive this over and over again, reaping negative results, even though the reprimand may never occur and imagining negative results may prevent the person from taking proactive steps to resolve the issue.

- **Self-talk:** People carry on internal dialogues all day long, even though they may not be consciously aware of doing so. Self-talk often corresponds to mental imagery and has a similar effect. Some people have primarily positive self-talk, which increases coping skills, while others have negative self-talk, increasing stress and emotional and physical responses to stress. People may benefit from practicing programmed positive self-talk.

- **Controlling/Perfectionistic behavior:** People who have unrealistic expectations of themselves also often have similar expectations of others, resulting in controlling behavior. Both types of behavior can lead to stress, anxiety, anger, and

frustration because it's hard enough to try to maintain personal perfection and virtually impossible to control other people. Sometimes something as simple as having people create lists of those things inside their control and outside may lead to discussion that can help people let go of their need for control.

- **Anger:** While anger is a normal response, especially when expressed appropriately, if people repress feelings of anger or experience excessive anger, they may have uncontrollable outbursts of anger. This type of behavior can result in low self-esteem and impaired interpersonal relationships. Chronic anger can cause severe stress with associated physical symptoms. People may need anger management therapy to help them deal with their anger more effectively.

Many people develop ineffective methods of managing interactions with their environment, increasing stress. Maladaptive management approaches include:

- Multitasking.
- Poor time management.
- Procrastination.
- Poor listening skills.
- Insisting on working independently and not depending on others.
- Inability to say "No."
- Difficulty allowing others to do their jobs.
- Impulsivity.
- Blaming others rather than taking responsibility.
- Denial of problems.
- Compulsive behaviors, such as shopping, sexual behaviors, gambling.
- Indebtedness.
- Poor self-care (hygiene, appearance, health).
- Substance abuse.

Treatment approaches

There is no magic bullet treatment for stress. Stress management often requires a number of different approaches, based on individual needs.

Healthy lifestyle

A healthy lifestyle can provide a buffer against the impact of stressors. Some lifestyles or habits may contribute to health risks, so eliminating these risks is an important first step in managing stress. Studies show that the most important factor in health status is social class,

especially educational level, so providing education and support is critical. Lifestyle changes include:

- **Smoking cessation:** Stopping smoking is one the primary measures to reduce illness, but people may need support, such as nicotine-replacement therapy, because smoking cessation can be very stressful, especially in the first months, although the end result of quitting is positive.

- **Regular health checkups:** Identifying and treating health problems and taking preventive measures are essential to a healthy lifestyle.

- **Adequate sleep:** Most people need about 8 hours of sleep nightly, but stress often results in insomnia. Strategies to improve sleep include regular bedtime, warm bath before bed, avoidance of alcohol and caffeinated beverages in the evening, and exercise during the daytime.

- **Physical exercise:** Ideally, adults should exercise a minimum of 30 minutes daily, with at least half of exercise vigorous that increases heart and respiration rate. Exercise can be spread through the day, but exercise periods should be at least 10 minutes. In addition, people should do muscle strengthening exercises at least 2 times weekly.

- **Breaks:** People should take regular breaks and should consider taking up a hobby, listening to music, or treating themselves as these activities promote a more positive outlook.

- **Nutrition:** People should try to eat a healthy well-balanced diet, avoiding high carbohydrate foods, which further increase glucose levels, and caffeine, which is a stimulant that can increase stress. People should not skip meals and should eat at regular times at least 3 times daily. Overeating, which is sometimes a response to stress, should be avoided. Some people may benefit from nutritional counselling and support groups, such as Weight Watchers®.

Coping strategies

Coping strategies can provide tools for people who struggle with stressors. Research shows that the primary means of coping include a

number of different approaches, all aimed at improving positive outlook:

- **Trying to be optimistic:** This can be challenging for those who tend to be pessimistic, but practicing positive self-talk, making lists of pros and cons, and keeping a journal to express feelings can help people learn to reorder their thinking. For example, if a person is faced with a stressor and makes a negative statement, the person should be encouraged to make a positive statement about the situation. Writing stressors down and discussing them can help the person to focus on the situation more realistically.

Situation	Negative statement	Positive statement
1. Excess workload	"I'm going to get fired if I don't finish this job."	"I'm doing the best I can, and I'm a good worker."
2.		

- **Using social support:** Social support from family and friends can be effective in reducing stress. People often hide the extent of their stress, but even talking about it with others can help to reduce the effects of stress. Family and friends may be able to help the person and reduce the burdens of work, school, or family in practical ways, such as by providing childcare or helping with tasks and supporting lifestyle changes. Some people may benefit from organized support groups. People may also benefit from establishing relationships with those with similar interests, such as in clubs or message boards.

- **Using spiritual resources:** Many people find solace in religion or other spiritual resources. Many religions offer fellowship groups to help people cope with stress. Some provide support for those with financial needs or visits to those who are homebound. Some people find that turning to a higher power helps them to reduce stress. On the other hand, sometimes religious beliefs may increase stress. For example, some people believe that problems are God's punishment while others believe that the stressors in their life are *karma,* about which they can do little.

- **Maintaining control:** Exercises in which people discuss a situation that caused stress, describe their initial reaction, and then discuss possible future reactions can help people learn to

maintain control by stopping and planning instead of becoming overwhelmed. People should focus on time management so that they get up on time, designate time and place to work/study, and minimize distractions.

Time management includes planning ahead, breaking jobs into small steps, and establishing priorities. The first step is often in creating a chart to outline how people spend time because people often are not accurate reporters regarding their time. For example, people who take frequent smoking breaks may be unaware of how this impacts their ability to complete tasks.

Day	Activity	Time spent
8:00	Morning hygiene	30 minutes
8:30	Smoke	10 minutes.
8:40	Newspaper	45 minutes
9:25	Breakfast, smoke	30 minutes

- **Accepting the situation:** In many cases, people have no control over the stressors in their lives, so they must learn to identify those things they can control and manage those while acknowledging those outside of their control. People can often find solutions to problems if they are clear about their own roles.

Medications

If people have physical ailments related to stress, such as hypertension, then medications are used to control these disorders. Medications are also sometimes used specifically to help people deal with stress, especially if they are experiencing severe anxiety or depression:

- **SSRIs** (such as Prozac®, Zoloft®, Paxil®) are commonly used to treat depression.
- **Anxiolytics** include benzodiazepines (such as Xanax®, Tranxene®, Serax®, Valium®) and non-benzodiazepines (such as BuSpar®, Equanil®).

However, medication only treats the results of stress, so medications should always be used with coping strategies and other methods to reduce stress.

Relaxation techniques

People often benefit from relaxation techniques to help reduce stress. Relaxation training produces a response that counters stress, decreasing the activity of the sympathetic and parasympathetic nervous systems.

Relaxation techniques require practice and must be used consistently, but in the long run, they often provide the best treatment for stress. A wide range of techniques is available, and many combine aspects of different approaches. For example, many relaxation techniques begin with rhythmic breathing.

Rhythmic breathing	Lie down and bend knees to relax the abdomen. Place a hand on the abdomen and slowly breathe in through the nose, feeling the abdomen rise. Then exhale slowly and completely through the mouth, feeling the abdomen fall. Repeat several times until relaxation occurs.
Progressive muscle relaxation	Lie or sit comfortably and beginning with the face, tighten muscles by frowning for 5 to 10 seconds and then relax. Move to other muscles of face, jaw, and then extremities and finally chest and abdomen, alternating between tensing and relaxing, until the whole body is relaxed.
Visualization/ Guided imagery	Begin with deep breathing and progressive muscle relaxation, then imagine a peaceful scene and imagine yourself in this scene, using all of your senses to imagine the sights, smells, sounds, tastes, and textures, keeping the mind focused.
Benson's relaxation response	Pick a short phrase or word that is meaningful to you and sit or lie in a comfortable position with your eyes closed and muscles relaxed. Use rhythmic breathing and focus on the chosen phrase or word, repeating it and keeping the mind focused on it although not fighting distractions. This type of relaxation is usually done twice daily for a preset period of time.
Music relaxation	Lie or sit comfortably with eyes closed while listening to slow, quiet music and imagine floating or drifting with the music. Headphones may be used to shut out distracting noises.
Biofeedback	Various monitoring devices can be used to help people learn to control physiologic responses. For example, electrodes may be placed on the fingers or other areas of the body to record physiological responses, such as heart rate. People use the information to recognize normal or abnormal states and then use a variety of techniques, such as muscle relaxation, rhythmic breathing, and visualization to reduce abnormal responses, such as to lower blood pressure.

Breathing meditation	Begin with rhythmic breathing while sitting in a comfortable position with the back straight. Focus on the sensation of breathing and resist distracting thoughts, always returning the focus to the breath for 10 to 15 minutes.

Summary

Stress occurs when a person perceives a challenge but is unable to adapt to change. Stress may be acute, acute episodic, or chronic. Three primary theories about stress include stress response, stimulus response, and environmental transaction. Common stressors include daily, environmental, family, financial, health, and work. Stress causes a number of physiological responses by activating the sympathetic and parasympathetic nervous systems, initiating the flight or flight response. Stress is associated with diseases of adaptation (such as hypertension, fibromyalgia, headaches, and irritable bowel syndrome). Stress may result in adverse symptoms in most body systems as well as social and behavioral symptoms. Anxiety is a primary cause of stress and may be classified as mild, moderate, severe, or panic. People respond in different ways depending on their mental processes, such as expectations, mental imagery, self-talk, controlling/perfectionistic behavior, and anger. Stress management includes a number of different approaches: Healthy lifestyle, coping strategies, medications, and relaxation techniques.

References

- Job Stress. (n.d.) *American Institute of Stress.* Retrieved March 19, 2011, from http://www.stress.org/job.htm
- Johnson, S. (2003). *Therapist's Guide to Clinical Intervention: The 1-2-3's of treatment Planning.* San Diego: Academic Press.
- Smeltzer, SC, Bare, BG, Hinkle, JL, & Cheever, KH. (2008). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*, 11 ed., Philadelphia: Wolters Kluwer/Lippincott, Williams, & Wilkins.
- Stoppler, MC. (2011, February 17). Stress. *Medicine Net.* Retrieved March 19, 2011, from http://www.medicinenet.com/stress/page10.htm
- Stress management. (2011). *American Heart Association.* Retrieved March 19, 2011, from http://www.heart.org/HEARTORG/GettingHealthy/StressManagement/Stress-Management_UCM_001082_SubHomePage.jsp
- *Stress Management: Self-care Handbook.* (2010). South Deerfield: MA: Channing Bete Company.

- Stress: The different kinds of stress. (2011). *American Psychological Association.* Retrieved March 19, 2011, from http://www.apa.org/helpcenter/stress-kinds.aspx
- Videbeck, SL. (2011). *Psychiatric-Mental Health Nursing,* 5th ed. Philadelphia, PA: Wolters Kluwar/Lippincott, Williams, & Wilkins.