Stress and Anxiety in the Disabled Patient

ELSA L. RAMSDEN
and LISA J. TAYLOR

This article focuses on patients' feelings of anxiety and fear and the relationship of these feelings to stress. A model is described that identifies four steps in the perception of environmental stress and the emotional responses to it. A second model describes the stages of responses to stress. Both models are applied to the patient experience, and suggestions are offered for basic facilitative physical therapist behaviors. A strong request is made for physical therapists to observe the affective behavior of patients, perceive it in the context of stress, and respond effectively.

Key Words: Anxiety; Physical therapy profession, patient services; Psychology, medical; Stress.

Most individuals have had muscle tension and headache that signal stress and have experienced the accompanying emotions. When physical therapists encounter stress in patients they treat, however, they often lack conscious awareness of the implications of stress for patient recovery and rehabilitation. Patients who experience the physical distress of illness also encounter psychological and social stresses that result from alterations in their physical function and social role. These stresses cause fear and anxiety with various physiologic and behavioral changes. Some anxiety may enhance performance and productivity, but the literature clearly indicates that high levels of anxiety hinder recovery from surgery and illness and prolong rehabilitation.

Mrs. Forest fractured her hip in a fall one year ago. Surgical replacement of the head of the femur was followed by acute sepsis and prolonged hospitalization. The next several months involved numerous painful procedures including surgery. Mrs. Forest was told each time, “This will be the last one!” Nine months after surgery, her condition was sufficiently stabilized to permit active exercise and rehabilitation. When she first came to the physical therapy department of the rehabilitation facility, she appeared tense and held the armrest of the wheelchair so firmly that her knuckles were white.

We speak rather casually about a patient's fear or anxiety but have little understanding of its meaning for the patient and its impact on behavior. The word stress pervades the literature today. Stress is directly related to fear and anxiety and is experienced in the health care setting by patients and health care professionals.

The purposes of this article are 1) to identify anxiety and its relationship to stress, 2) to discuss factors that lead to stress within the framework of a four-step model, and 3) to identify some individual responses to stress. Ways to manage stress constructively when physical therapists encounter it in patients are presented. Physical therapists who attend and respond to patient behavior that results from stress can help patients understand and cope with their feelings and ultimately improve their participation in treatment.

ANXIETY

Anxiety is a common emotional response to feeling threatened or endangered. Fear is a reaction to a specific danger, and anxiety is a response to something unspecific, diffuse, vague, and objectless.

Mrs. Jones sat in a wheelchair in the gymnasium of the physical therapy department waiting for her first appointment. She watched carefully as another patient was moved from a litter to a treatment table and was then strapped down. The patient seemed too quiet. A strange apparatus was attached to the patient’s head, and then the patient was hung! It looked like some form of medieval torture machine. Mrs. Jones began to tremble as she moved her chair toward the door to escape.

Mr. Benson had practiced ambulation in the parallel bars and had even used crutches inside the bars. But making the shift to walk outside the parallel bars seemed like such a big step! He felt tense and unsure of himself. Could he do it? What if he couldn’t? The therapist wouldn’t let him fall, he knew that. The first step was so difficult.

The first vignette illustrates a situation that produced fear and a physical response to fear. The second vignette describes a setting in which the patient is not threatened physically but feels anxious because of a nonspecific threat to something that is important—his self-esteem.

Key features of anxiety are feelings of uncertainty and helplessness, which cause individuals to feel the essence of being has been threatened. Whitehead et al described anxiety as, “the apprehension cued by a threat to some value which the individual holds essential to his existence as a personality.” This threat may be to 1) physical safety, 2) psychological well-being, or 3) another value the person has identified with...
life, such as freedom. Physically disabled and hospitalized patients encounter all three threats on a regular and continuing basis.

Mrs. Randall is 80 years of age and has cerebrovascular disease that has affected her speech severely. She articulates with difficulty, and only her family understands her—most of the time. When something really matters to her, she writes what she wants to communicate. She is physically limited by severe angina and relies on her husband for balance and support when walking outside the house. Recently, it was discovered that Mr. Randall has prostate cancer with metastasis to lung and bone. When speaking with her daughter about her husband, Mrs. Randall's eyes expressed a terrified look, and she admitted being afraid. She wondered aloud, “What will happen to me if he should die before I do?”

What does anxiety look like? Anxiety may be inferred from altered behaviors in attention, learning, and interpersonal relationships. Some patients may be unaware of anxiety and may even deny the feelings often associated with it. Normal anxiety may be characterized as a reaction that 1) is disproportionate to the objective threat, 2) involves normal intrapsychic defense mechanisms, and 3) is confronted constructively using personal strengths and resources or is relieved with a change in circumstances. Neurotic anxiety may be identified as behavior that 1) is disproportionate to the objective danger, 2) involves some form of intrapsychic conflict, and 3) demonstrates rigid reliance on immature coping skills.

The distinction between normal and neurotic anxiety is important when viewed from the rehabilitation perspective. Physical therapists encounter patients who manifest signs of anxiety while experiencing illness, disability, or losses. Some degree of anxiety is normal; an absence of anxiety should raise suspicions because it would be abnormal.

What actions should a physical therapist take to determine whether the patient’s anxiety is appropriate to the situation?
1. Discuss the specific behavior with the patient and ask whether this behavior would have been normal before illness and disability. The therapist, for example, might say, “Mrs. Dennis, I see you rolling and unrolling your handkerchief while you are waiting for your treatment. Is that something you’ve always done, or is that new behavior since your illness?”

2. Examine carefully the treatment of the patient and analyze the meaning of illness in terms of the patient’s life style, family responsibilities, and independence.
3. Accept the patient’s behavior as natural under the circumstances and discuss this with the patient. Frankl stated, “Abnormal behavior under abnormal circumstance is normal.”
4. Provide information appropriate to the patient’s need that will help establish expectations and set a standard for comparing behavior.

Signs and Symptoms of Anxiety

Some patients may say that they feel tense, anxious, or jittery. More frequently, however, patients will not disclose feelings of anxiety and may even deny them when asked directly. In our society, a strong inclination exists to deny anxiety and associated feelings even when circumstances warrant such a response. When the therapist acknowledges feelings and encourages patients to discuss their feelings, a therapeutic benefit results for the patients. The discussion allows 1) acceptance by the therapist of the patient’s behavior, 2) gradual acceptance of feelings by the patient, 3) objective discussion that may lead to problem solving, and 4) acceptance of physical limitations imposed by illness.

Obvious physical symptoms of severe anxiety include tremor, dilated pupils, excessive sweating, sleeplessness, and disrupted speech. The moderately anxious patient may demonstrate an alertness with a quality of being “on guard.” This alertness may be accompanied by a studied posture of relaxation, a general stiffness apparent in any position, a rather fixed gaze, or drumming of fingers. Moderate anxiety induces restlessness, an intensity and eagerness, and unnecessary speed in response to requests by staff.

A patient may unconsciously demonstrate various behaviors to avoid anxiety. These behaviors would be neurotic only if rigidly adhered to or compulsively acted out. For example, rigid thought patterns of religious or health beliefs provide an armor of protection from threat to patients’ values. The therapist encounters a formidable dilemma when the patient says, “God did this to me. He wants me this way for a reason. So you can’t do anything about it.” Patients may attempt to relieve the tension that often accompanies anxiety with laughter, jokes, frantic activity, or talking, which succeed only in the short run. Compulsive activity and substance abuse are more extreme responses to anxiety.

Some Causes of Anxiety

Deterioration of physical and social functioning are two major causes of anxiety. Psychological conflicts and difficult interpersonal interactions are also common causes of anxiety. Specific examples of anxiety-producing events include sexual conflict, expression of aggressive impulses, separation from a loved one, economic and social insecurity, religious conflicts, illness, pain, and loss of functional independence. The common feature that produces anxiety in all these events is the perceived lack of ability to mediate the situation successfully. The lack of ability may be due to inadequate time to resolve the problem or to adjust to the circumstances. Because all individuals have a basic need for stability in some portion of life, the disruption imposed by serious illness or disability threatens stability and results in signs of distress and anxiety.

Mrs. Johnson is an elderly woman living in the personal-care facility of a life-care community. She had a right cerebrovascular accident five years ago and subsequent multiple infarctions with resultant mild paresis on the left side, left-side neglect, and hemianopsia. She experiences mild depression, denial of disability, and increased muscle tone on the involved side, and has decreasing control of bowel and bladder functions. When the staff reminds Mrs. Johnson to go to the bathroom, she responds that she doesn’t need to. When she soils herself, she tries to manage herself, cannot, and subtly resists help when it is offered. She becomes agitated and angry, and feels very embarrassed, depressed, and offended by the clean-up process.

Several factors influence the degree to which any threat to stability would produce anxiety. These factors include whether the situation is perceived as long or short in duration, whether a conflict of values is involved, whether the individual’s past experiences predispose a susceptibility to anxiety, and hereditary predisposition. The health care environment
and the illness or disability crisis act as very real stressors to psychological well-being, continuing social status, and economic stability. These factors, considered singly or in combination, may result in anxiety of large proportions.\textsuperscript{10}

**PERCEPTION OF STRESS**

A model for stress research suggested by Kahn, aimed at the study of organizational settings, can be applied to patients in the health care setting.\textsuperscript{11} Kahn's model views stress as a generic label for several variables linked together:

1. Patients' perception of the way their environment is organized may lead to strong emotional feelings. For example, when patients are admitted to the physical therapy clinic or department, they often perceive the admission process as lengthy, difficult, and uncomfortable. This perception leads to feelings of frustration, anger, and irritability.

2. Patients may feel that the demands of their environment are excessive and that others expect too much of them. They experience fear of the unknown, uncertainty about the competence of health care professionals, and concern about their own ability to perform adequately. The perceived difficulty of the admission and evaluation processes adds more problems to patients' already burdened psyche. Some patients describe their feeling of being "pushed too far."

3. Patients' perceptions and feelings may lead to short-term physiologic reactions. Their response is called adaptation (or coping or defense mechanism). One patient might interpret the admitting process as too long, too tiring, and too frustrating, and respond by becoming angry and verbally abusive to the admitting clerk or the physical therapist. Another patient might interpret the admitting process as lengthy, but assert that "after all, this is a big and important hospital and everyone is very busy here. They are doing the best they can, and I'm just grateful that I can be here at all."

4. Finally, responses to stressful circumstances may lead to more lasting changes in mental and physical health. Prolonged physiological responses, for example, may lead to ulcers or hypertension. Stress over a long period of time leads to "last straw" experiences. The patient who erupts verbally to the admitting clerk or to the physical therapist is experiencing one more stressful situation, not one isolated situation.

These variables interact and persist depends on the enduring characteristics of the patient's personality, the interpersonal situation, and the environment. Differences in response are a function of all the elements that make an individual unique (eg, age, sex, race, religion, education, social experience, and cultural group experience).

Responses of the patient are also influenced by the interpersonal situation and whether it is perceived by the patient as supportive or hostile. It is important to the patient that the health care professional communicates appreciation for upset feelings when they occur. If the therapist tries to explain why events occurred as they did, an adversarial relationship may develop because the therapist appears to side with the establishment rather than trying to understand the patient.

The organizational rules of the hospital or clinic also affect the responses of the patients. The subculture of the health care institution operates with many laws, policies, procedures, unwritten rules and expectations, traditions, and mores. Some of these rules are explicit and written, but many are unwritten, as are the rules of society. Both written and unwritten rules are unknown to the average patient, yet these rules govern the care extended to patients by health care professionals. These rules also create expectations for patient behavior.\textsuperscript{12}

For example, the patient perceives the environment through sensory systems already taxed by discomfort and pain and often feels that the demands of the environment are beyond the limits of reason.

Any person experiencing a health crisis has real reasons to feel fear and anxiety. The crisis outcome is uncertain, the treatment may be unknown, and the physical therapist and other care givers are usually strangers. Most care givers behave in a manner that suggests that patients should automatically trust them because of their professional identity. If a patient behaves in a manner that implicitly or explicitly questions trust, the health care professional may feel insulted and perhaps threatened. When a physical therapist experiences this threat to authority or competence, it is common to feel anxious and to respond defensively. When both the patient and the therapist focus on their own feelings and work to protect their self-concept from threat, neither individual is working on interpersonal negotiation for the benefit of the patient.

**Response to Stress**

As individuals, when we know in advance that a particular problem must be dealt with, we prepare ourselves mentally, physically, and emotionally. Illness represents a threat to personal integrity by diminishing confidence in all areas. Illness is interpreted as an assault to body image in terms of function or physique. Body image is a mental picture of one's own body that develops over many years. It incorporates reality and an idealized "wish" conditioned by cultural values and social group norms into what becomes a relatively stable self-concept in the adult. Any threat or alteration to body contour or function produces stress to the body image retained by the psyche and leads to physiologic and behavioral responses.

Zegans suggests a four-stage model of reaction to stress that is useful in understanding these responses of patients.\textsuperscript{13} *Alarm*, the first response to a noxious stimulus, leads to increased arousal and attention to the stimulus with decreased involvement in ongoing activities.

*Appraisal* involves an assessment of the situation and a cognitive strategy comparing the situation with former similar occurrences. Appraisal includes not only what the current stimulus is and means but what it meant in the past, how it was handled then, and the significance it holds for the individual at the moment. No simple relationship exists between a stressful stimulus and the emotion that evolves from it.

Search for a *coping strategy* suited to the type of stress is the third stage. Stressful events can be separated into three varieties: 1) those that are familiar through experience, 2) those that are familiar through vicarious experience, and 3) those that are unfamiliar. In the case of familiar stress, the individual may draw on experience to shape a response. If failure or pain accompanied that earlier experience, then anxiety is aroused that may lead to some change in behavior to shape a different and more appropriate behavior. If the anxiety is severe, the individual may be immobilized and may fail to respond except with heightened emotion.

When the stressful situation is familiar through vicarious experience, the individual may infer an appropriate response.
For example, if a patient has never had a computer assisted tomography scan but has seen it demonstrated on television or has had a roentgenogram, he can extrapolate from these experiences to shape an appropriate response to the stress of the new test. The emotions associated with other situations will influence the patient’s emotional response in the current situation.

When the situation is totally unfamiliar, the patient has no previous experience to guide a coping response. No appropriate cognitive map exists in the patient’s repertoire. Coping strategies must then deal either directly with the stimulus or indirectly with the meaning it represents for the patient. In the direct approach, the patient must believe that an adequate strategy exists and pursue it. If no coping strategy seems viable to alter or eliminate the stressful situation, however, then the patient’s psyche may alter the way the situation appears to reduce the threat of the stress. The capacity of the psyche to neutralize threats allows the patient to avoid or minimize stressful events that might otherwise lead to strong emotional responses. When an individual’s value system has included punctuality throughout adulthood, for example, the patient experience may provide serious stress while waiting for tests and appointments delayed beyond the patient’s control without explanation. Some patients unsuccessfully try to change the system and experience frustration and anger. Others alter the meaning of “appointment” to reduce their need for punctuality. Frustration is thereby reduced, and tardiness is perceived in a more acceptable light.

The fourth stage of stress response may include acute affective states (eg, anxiety, grief, and panic) and poor cognitive functions and ego defenses. These responses lead to altered autonomic nervous system and neuroendocrine functions that influence mental and physiological processes. The Table shows the major features and relationships of the Kahn’s11 and Zegans’s13 models.

The experience of being a patient leads to anxiety-provoking situations in which the patient regularly participates in a process filled with unwritten and unstated rules. Feelings of dependence, helplessness, inferiority, and loss of identity result. An elderly resident in a life-care community described the status of a recent arrival as, “She’s being instituted, so she’s very busy. It’s all very confusing for her.” The patient in the acute care setting, however, has no formal initiation. No rules of conduct or explicit responsibilities guide patient expectations and behavior. The absence of specific definition produces additional unknowns for patients, which increase their anxiety and fear and produce a stressful environment.

**INTERVENTION STRATEGIES**

Horney stated, “Anxiety is the dynamic center of neuroses and thus we shall have to deal with it all the time.” The hospitalization experience produces various anxieties for patients: 1) anxiety related to real fears (eg, bodily hurt and lack of information about procedures), 2) anxiety related to underlying conflicts (eg, loss of identity and status associated with assuming the patient role), 3) anxiety related to cultural factors (eg, unknown rules that govern the behavior of health care professionals and their expectations of patient behavior), and 4) anxiety related to control of emotions.

The patient’s behavior is the best clue to the presence of anxiety and the need for support. The first requirement in making a strategic intervention, therefore, is careful observation. The overused admonition to treat patients with objectivity unfortunately leads to a failure of therapists’ sensory apparatus. We look but do not see, hear but do not listen, and feel but do not sense. Rogers’s plea to see the world through the eyes of the patient without experiencing the feelings ourselves is a more useful directive for physical therapists than is objectivity.

The second requirement is to talk with the patient about the behavior that the physical therapist believes to be anxiety. Prejudging the patient’s feelings is a temptation because there are so many obvious possibilities. Patients, however, may have something highly specific or personal causing a particular behavior. Allow patients to express in their own words how they feel. Instead of saying, “Are you worried about the test tomorrow?” a more open question would be, “How are you feeling?” or “Is something bothering you? You seem upset to me.” The first question assumes that the patient should feel anxious; the second question allows free choice of words. A good rule of thumb is to avoid questions that can be answered “yes” or “no” by the patient.

When the patient’s response is in the feeling arena, the most helpful intervention may be to acknowledge and accept the patient’s feelings as normal and reasonable under the circumstances. Then provide a few words of explanation or instruction so that patients can establish expectations and have a standard of comparison for their own performance. The patient needs to know that the physical therapist cares and accepts both the patient and the behavior. Remember that accepting is not the same as agreeing. We can accept the patient and the statement, “I look awful since this happened to me.” We can appreciate that the patient feels the way she does, but we do not have to agree that she looks awful. The appropriate response would be something like, “I can appreciate that you feel that way. Would you like to say more about that?”

**TABLE**

<table>
<thead>
<tr>
<th>Kahn’s Stages in Stress Perception</th>
<th>Zegans’s Stages in Stress Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of environment leads to feelings of physical and emotional discomfort.</td>
<td>Alarm</td>
</tr>
<tr>
<td>Feelings of discomfort lead to the feeling that expectations are excessive.</td>
<td>Appraisal</td>
</tr>
<tr>
<td>Physical and emotional feelings lead to short-term accommodation.</td>
<td>Coping strategy</td>
</tr>
<tr>
<td>These additional physical and emotional feelings may lead to long-term physiologic responses.</td>
<td>Stress response</td>
</tr>
</tbody>
</table>

**CONCLUSION**

Patients experience stress imposed by many circumstances related to physical illness. Anxiety is easily aroused by the added stress of new dependency, powerlessness, and loss of normal social role, leading to unpredictable behavior. Physical therapists must be attentive to patients’ behavioral evidence of stress and deal with stress constructively to facilitate optimal patient participation during treatment.
REFERENCES