SERIES IN ANXIETY AND RELATED DISORDERS

# TREATING HEALTH ANXIETY AND FEAR OF DEATH

## *A Practitioner's Guide*

Patricia Furer
John R. Walker
Murray B. Stein

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To Hal, Matthew, and Sarah, for your love and support. *PF*

To Joannie, Ian, and Andrea, for your love and encouragement. *JW*

To Dorit, Nathan, Rebecca, and Orah, for ignoring me
when I complain about my health. *MBS*

# ABOUT THE AUTHORS

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# PREFACE

Our interest in health anxiety has been developing over the past 20 years. It grew out of our work with adults with a variety of anxiety disorders. We often found that our clients would describe intense anxiety about illness and death. When we asked about significant life events related to the development of anxiety, many people noted that their problems intensified when there was serious illness or death among those who were close to them. As our interest in fears of illness and death developed, we started to ask clients more directly about these concerns, and we were struck even more by how common these fears of illness and death were for people with various anxiety disorders.

When we looked for research to guide us in helping our clients with these concerns, we were struck by how little had been done on the treatment of health anxiety. The work of the pioneers in this area (Arthur Barsky in Boston; and Isaac Marks, Hilary Warwick, and Paul Salkovskis in the UK) was helpful, but there was, initially, little specific information to guide the clinician. We could find no research on the treatment of death anxiety in clinical populations.

While clients were enthusiastic about obtaining help in dealing with health and death anxiety, other clinicians often expressed discouragement about the challenges of dealing with these problems and made comments such as "What an impossible area to work in!" and "How can you see clients who complain all the time?" We are pleased to say that we have found this to be enormously interesting and rewarding work.

In developing interventions, we used our experience with treatment of the anxiety disorders. We also looked to the early studies of treatment of hypochondriasis that were beginning to appear in the literature. When it became known that we had a special interest in treatment of health anxiety, we received many interesting referrals. As a result, we have now seen

many clients for individual and group therapy addressing a wide variety of concerns related to fear of illness and death. This has allowed us to fine-tune our intervention strategies and develop materials that are helpful in implementing treatment. This book represents our efforts to put these ideas in one place in a format that we hope clinicians will find useful.

In writing this book we focused on the interests of clinicians. Part 1 consists of three chapters that focus on understanding health anxiety in its various forms. Part 2 describes practical approaches to assessment and treatment. The principal components of intervention are described in separate chapters with client handouts that may be used by the clinician in implementing treatment. Chapter 6 describes how the treatment components can be applied in an integrated fashion based on the case formulation. Part 3 describes adaptations of treatment useful when dealing with children and adolescents, the medically ill and the elderly. The book ends with a list of resources that we find useful in our clinical work.

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# FEAR OF ILLNESS AND DEATH

Health is one of the most important sources of security in life, affecting our ability to care for ourselves, our family and home, and our work. It is not surprising that many people experience anxiety concerning their health or the health of loved ones. Health anxiety may be triggered by experiences such as everyday symptoms (a skipped heartbeat, a headache), a threatening experience such as finding a breast lump, or coping with illness or death of a loved one. Anxiety may also be triggered by stories about health issues in the community or media. Worries may be mild and transient or they may have a more severe and chronic course, waxing and waning over time. Some individuals may worry about a specific illness or body symptom, while others worry about many. Conviction about actually having a serious disease may be part of the picture. Health anxiety is often associated with high levels of worry, excessive focus on bodily symptoms, checking for symptoms and signs related to health concerns, and frequent efforts to obtain reassurance. Individuals with high degrees of health anxiety often have high levels of health service utilization. Others may avoid health care professionals because of fears about being diagnosed with a serious disease or because of dissatisfaction with previous health care experiences.

Health anxiety is the central feature of hypochondriasis and plays a major role in other somatoform disorders and somatization in general. It

is often seen in other clinical conditions including anxiety and depressive disorders. Health anxiety may be involved in the development of common anxiety disorders, such as panic disorder and some forms of obsessive-compulsive disorder (OCD). Given the importance of health anxiety, it is exciting to see increasing interest in this topic among clinicians and researchers.

## WHY SHOULD WE BE CONCERNED ABOUT HEALTH ANXIETY?

### Developmental Factors

Somatic symptoms are one of the earliest ways that humans experience and express their emotional distress. Parents and other caregivers know how often young children report symptoms such as feeling sick, stomachaches, or headaches, when facing difficult experiences. We are also aware of the wide variety of responses among children at different ages to cutting or scraping their skin, putting on a bandage, taking medicine, visiting the doctor or dentist, or having an injection. Most children will experience events that relate to health anxiety, such as the illness or death of a grandparent, death of a pet, and serious illness or death among schoolmates or parents of schoolmates. One of the developmental tasks of childhood is learning to deal with health challenges and concerns. As teenagers, young people are exposed to a variety of health messages communicating, for example, the dangers of smoking as a risk factor for cancer, and unprotected sexual activity as a risk factor for HIV.

### Symptoms that may Trigger Health Anxiety are Common

Demers, Altamore, Mustin, Kleinman, and Leonardi (1980) used a daily symptom diary to study the health problems in 107 healthy members of a health-maintenance organization. Children, adult females, and adult males averaged 3.3, 3.7, and 2.6 problems, respectively, over a three-week period. Fewer than half of all study days were problem-free. Less than 6% of the problems received professional medical care.

Rief, Hessel, and Braehler (2001) describe a study of somatic symptoms and health worries in a representative sample of 2,050 Germans. Respondents were asked whether they had experienced each of 53 symptoms during the previous two years. They were instructed to answer "yes" only if the symptom had a significant influence on their subjective well-being and if doctors did not find a sufficient explanation for the

complaints. Persons with physical illness were not excluded but were instructed only to report physically unexplained symptoms. The most frequently reported symptoms were pain (back pain 30%, joint pain 25%, pain in extremities 20%, headache 19%, and chest pain 5%), gastrointestinal symptoms (bloating 13%, intolerance of several foods 12%, abdominal pain 11%, and stomach discomfort or churning 11%), and cardiovascular symptoms (palpitation 11%). Most symptoms were more common in those respondents 46 years of age and over.

## Life Experiences that may Trigger Health Anxiety are Common

People often report fears of events that are unlikely to occur (for example, being in a plane crash, being attacked by a vicious dog, making a fool of oneself at a party, or failing in an exam). In contrast, all of us will have to deal with health problems frequently over the years and all of us will die, perhaps in an unexpected way. In a fascinating longitudinal study of female twins (average age 30), Kendler et al. (1995) gathered information on stressful events over a one-year period and considered these events as predictors of the onset of episodes of major depression. Common stressful life events within the respondents' family networks included, in order of frequency, serious illness of a close relative, serious trouble getting along with a close relative, and death of a close relative. Death and serious illness of other individuals close to the respondent were also common. In contrast, events such as being the victim of robbery or assault were much less common. These events were significantly related to the onset of a new episode of depression in the month after the event. It is possible that events such as these could trigger health anxiety in susceptible individuals.

## Health Coverage in the Media

The media is full of alarming stories concerning health. During one 14-week health anxiety treatment group conducted in our clinic, there were major stories in the media concerning West Nile virus and increased risk of cancer with hormone replacement therapy in post-menopausal women. Both stories were relevant to many members in the group who had to make decisions concerning their own health behavior. Often, health-related stories do not emphasize the absolute level of individual risk. A story describing a doubling of cancer risk may not indicate that the risk increases from one case in 1,000 to two cases in 1,000 (a doubling of a low level of risk). Health messages may also provide contradictory recommendations, increasing the level of uncertainty.

## Health Care Utilization

Modern health care systems deal with health anxiety by offering medical services and tests with the goal of providing reassurance. This strategy may often be successful. For individuals with chronic difficulty with health anxiety, however, medical evaluations may not have this effect; in fact, they may feed the problem. Kroenke and Mangelsdorff (1989) illustrated the high cost of investigating common somatic symptoms by studying a series of 1,000 patients seen in an internal medicine clinic serving members and retirees of the armed forces and their dependents. The study focussed on new complaints or recurrent complaints requiring a new evaluation. Presenting symptoms included pain (headache; chest, back, and abdominal pain), fatigue, dizziness, edema, dyspnea, insomnia, and numbness. The percentage of symptoms judged to be organic ranged from 3 to 36%. Further investigations were requested for 70% of symptoms initially judged to be organic, 70% of those of unknown etiology, and 43% of those with psychological etiology. Most organic diagnoses could be assigned based on the initial interview and physical examination, so relatively few additional organic diagnoses were identified with further investigation, and there was a high expenditure for investigation for each additional organic diagnosis identified ($720–$7778). Note that these are costs established in the late 1980s. With a broader range of tests available and current prices, costs are now likely to be considerably higher.

Barsky, Ettner, Horsky, and Bates (2001) considered service utilization in relation to health anxiety and somatization among 876 patients attending a primary care clinic. Respondents who indicated clinically significant levels of health anxiety and somatization on a self-report questionnaire had 38% higher outpatient service costs over the year before the consultation and 22% higher costs in the year after the consultation.

In a comprehensive study of the cost of somatoform disorders, Hiller, Fichter, and Rief (2003) describe the reductions in costs and the economic benefits that may be achieved with cognitive-behavior therapy (CBT). In the two-year period before treatment, participants had outpatient service costs 2.5 times higher than the average for the country and inpatient service costs 1.8 times higher. During the two-year period after treatment was completed, there was a 25% reduction in outpatient costs and a 37% reduction in inpatient service costs. There was a 26% reduction in the number of days participants were unable to work because of health problems. At the same time, individuals in the CBT program showed a reduction in health anxiety, distress, and depression. The intervention took place in an inpatient setting in Germany, where there is more use of inpatient services. It remains to be seen whether similar results could be

achieved through the outpatient service models typically provided in other Western health care systems.

### Discomfort Among Health Service Providers

Difficulties with health anxiety and somatization may place patients and health care providers in uncomfortable territory between medical care and mental health systems. Medical service providers may feel comfortable offering information about physical health and symptoms, but may be less comfortable in addressing the health anxiety directly. Patients may be reluctant to be referred from a medical setting into a specialized mental health service. Mental health practitioners, on the other hand, may feel some discomfort about medical issues that may be ambiguous, and may delay intervention with the hope that the medical situation will become clearer. Increasing the comfort and skill of medical and mental health providers in addressing health anxiety may allow for more effective and less costly services. Providing services in the primary health care setting is likely to increase the willingness of patients to use these services (Cummings, 2001).

### Health Anxiety Cuts Across Diagnostic Categories

As a process, health anxiety cuts across a wide variety of diagnoses, including hypochondriasis, somatization disorder, other somatoform disorders, panic disorder, generalized anxiety disorder (GAD), OCD, specific phobia, mood disorders, and adjustment disorder. Understanding health anxiety and increasing our knowledge about its treatment may thus serve to enhance our effectiveness with each of these disorders.

## TERMINOLOGY

It has been a challenge to find terms acceptable to both clinicians and clients for the phenomena observed in somatoform disorders in general and hypochondriasis in particular. The history of the term *hypochondriasis* has been reviewed by Berrios (2001). The term began to take on its current meaning in the 1600s, after being used back to the time of the Greeks to describe an area of the body below the rib cage (*hypochondrium*). Most clients do not appreciate being labeled as a *hypochondriac* and view this term as implying that the symptoms are not real or that "the symptoms are all in your head." While some individuals may jokingly acknowledge that family members use the term hypochondriac to refer to their situation, they prefer that this label not be applied in medical settings.

They fear that this diagnosis will mean that future symptoms will not be taken seriously. Terms we have found to be well accepted by clients are *intense illness worry* and *health anxiety*.

Salkovskis and Warwick (2001) note that anxiety is best understood as a reaction to perceived threat. The more important and imminent the threat, the greater the anxiety. Threats to health are regarded by most people as especially important. Consequently, *health anxiety* is common in both the community and the clinic. This anxiety may be experienced in the areas of cognition, bodily symptoms, and behavior.

*Somatization* is a phenomenon that is often seen in situations where health anxiety is prominent. Lipowski (1988) provided a very clear review of the concept. He wrote:

> Somatization is defined here as a tendency to experience and communicate somatic distress and symptoms unaccounted for by pathological findings, to attribute them to physical illness, and to seek medical help for them. It is usually assumed that this tendency becomes manifest in response to psychosocial stress brought about by life events and situations that are personally stressful to the individual. This interpretation represents an inference on the part of outside observers, since somatizing persons usually do not recognize, and may explicitly deny, a causal link between their distress and its presumed source. They respond primarily in a somatic rather than a psychological mode and tend to regard their symptoms as indicative of physical illness and hence in need of medical attention (p. 1359).

This definition includes experiential, cognitive, and behavioral aspects. Lipowski described several important dimensions of somatization, including its duration, the degree of hypochondriasis accompanying the symptoms, the degree of overt emotionality or distress, and the person's ability to describe feelings or emotion states. Individuals with somatization may vary a great deal along these dimensions.

Terms that have been used for problems with somatization include *medically unexplained physical symptoms* (Melville, 1987) and *functional somatic symptoms* (Kellner, 1987). The problem with the term *medically unexplained* is that it could suggest that an appropriate response is to continue medical investigations until the symptom is adequately explained. One can imagine the challenges in management that could arise from announcing to a patient that she has medically unexplained symptoms or that she has a psychiatric condition called undifferentiated somatoform disorder. She is likely to respond with frustration and disappointment, and perhaps by continuing to seek a reasonable explanation for her symptoms. We prefer terms that refer to the specific symptom or symptoms that are the focus of the individual's concern, such as *noncardiac chest pain,* and, for broader ranges of complaints, Kellner's term *functional somatic*

*symptoms*. In fact, we do have a reasonably good understanding of many of these symptoms, and the factors that make them worse (such as anxiety, depression, and increased somatic focus; see Henningsen, Zimmermann, & Sattel, 2003). Factors that may reduce these symptoms include exercise, relaxation, reduced attention, and conservative medical management. Studies described in Chapter 2 indicate that patients prefer to have a clear descriptive name for their health problems and clear recommendations for management.

In this book we will use the term *health anxiety* broadly to include situations ranging from high levels of anxiety experienced in response to realistic threats to health, to the forms of health anxiety seen along the continuum leading to hypochondriasis, and to the aspects of anxiety seen in individuals with high levels of somatic concern or somatization.

## CATEGORICAL VERSUS DIMENSIONAL VIEW

Kessler (2002) reviewed the research addressing categorical and dimensional approaches in the epidemiology of mental disorders. Community studies suggest that anxiety and depressive symptoms are distributed in a way that clearly supports a dimensional, rather than a categorical, point of view. This is true of other important characteristics of individuals, such as blood pressure levels and weight. Having cut-off points that allow for categorization, however, facilitates the development of prevalence estimates and produces stable categories that are useful in research. Categorization also allows for the development of clinical guidelines for identifying individuals who are severely affected by a problem. The disadvantage of the categorical approach is that for every individual with a full-blown expression of the condition, there are others who meet some, but not all, of the criteria. Individuals who meet partial criteria may have similar levels of distress and disability and may meet the full criteria for the disorder at other times. Kessler argues for the use of research approaches that allow us to consider both dimensional and categorical views to take advantage of the strengths of each perspective. A dimensional view allows for consideration of differing levels of severity of symptoms among individuals and the fluctuation of symptom intensity that is often seen for each individual. Dimensional measures may also allow for more detailed assessment of different aspects of the problem.

Pilowsky (1967), for example, carried out a factor analytic study of hypochondriacal symptoms among 200 psychiatric patients. Half were selected because clinicians described them as having a high level of hypochondriacal symptoms and the other half were selected for having

low levels. Three dimensions of hypochondriasis were identified: *bodily preoccupation*, *disease phobia*, and *disease conviction*. Bodily preoccupation describes the tendency to focus attention on bodily symptoms and to be alarmed by unusual or unpleasant symptoms. Disease phobia is a fear that one will develop a serious disease, usually one that is life threatening or severely disabling. Disease conviction is the belief that one has a serious disease even though health care providers do not make a diagnosis consistent with this disease. A recent factor analytic study with a larger sample and broader range of measures (Hiller, Rief, & Fichter, 2002) confirmed the importance of these three factors in hypochondriasis. Further, they found that the best subscales for discriminating among hypochondriasis, somatization, and psychiatric control groups (with depressive and anxiety disorders) were measures of disease phobia.

## DIAGNOSTIC CLASSIFICATION OF HEALTH ANXIETY

Even though there are advantages to a dimensional view of health anxiety and somatization, much of the work in the area of mental health has been in the context of categorical diagnostic systems. The most widely used system for mental disorders is described in the *Diagnostic and Statistical Manual of Mental Disorders,* 4th edition, Text Revision (DSM-IV-TR), published by the American Psychiatric Association (2000). Diagnostic definitions are based on the work of expert committees who consider the evidence about the characteristics of the problem observed in the clinic or the community. Although the classification system described in DSM-IV-TR is used in North America and has influenced much of the research in the mental health area, the ICD-10 (*International Classification of Diseases*, 10th edition, World Health Organization, 1993) is used as an alternative in many regions. This system has been influenced by DSM-IV-TR but the diagnostic criteria are not identical.

Health anxiety is seen in a wide range of DSM-IV-TR and ICD-10 diagnoses. In the following section we will describe the somatoform diagnoses most closely associated with health anxiety. Presentations of health anxiety in other common disorders are then discussed.

### SOMATOFORM DISORDERS

DSM-IV-TR describes somatoform disorders as follows:

> The common feature of the Somatoform Disorders is the presence of physical symptoms that suggest a general medical condition (hence, the term somatoform) and are not fully explained by a general medical condition, by

> the direct effects of a substance, or by another mental disorder (e.g., Panic Disorder). The symptoms must cause clinically significant distress or impairment in social, occupational, or other areas of functioning. In contrast to Factitious Disorders and Malingering, the physical symptoms are not intentional (i.e., under voluntary control) (p. 485).

Note that individuals with somatoform disorder may also have related medical conditions, but the reaction to the symptoms is beyond what would normally be expected in that condition. In addition to hypochondriasis, the somatoform category includes somatization disorder, undifferentiated somatoform disorder, conversion disorder, pain disorder, body dysmorphic disorder, and somatoform disorder not otherwise specified.

### Hypochondriasis

The definition of hypochondriasis has remained consistent through the latest editions of the DSM classification. The DSM-IV-TR criteria for a diagnosis of hypochondriasis are that the individual must report significant fears of having, or the idea that he or she has, a serious disease based on a misinterpretation of bodily symptoms. This preoccupation must persist for a period of at least six months, even with appropriate medical evaluation and reassurance, and must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

The criteria for hypochondriacal disorder used in the ICD-10 differ significantly from the DSM-IV-TR criteria. ICD-10 requires: (a) Persistent belief in the presence of at least one serious physical illness underlying the presenting symptom or symptoms, even though repeated investigations and examinations have identified no adequate physical explanation, or a persistent preoccupation with a presumed deformity or disfigurement; (b) persistent refusal to accept the advice and reassurance of several different doctors that there is no physical illness or abnormality underlying the symptoms. *Includes:* body dysmorphic disorder, dysmorphophobia (nondelusional) [fear of deformity], hypochondriacal neurosis, nosophobia [disease phobia] (p. 165).

The most notable difference between the systems is the inclusion of body dysmorphic disorder in ICD-10 Hypochondriacal Disorder. This is considered to be a separate diagnosis in DSM-IV-TR. The different views of hypochondriasis may result in difficulty comparing results in studies using the different systems.

*Hypochondriasis: Margot, 35 years old, was referred for treatment of panic disorder. In describing recent panic attacks, she reported that episodes started when she noticed a bodily symptom that triggered health concerns. As she thought about the*

*symptoms, the anxiety escalated and she would have a panic attack. When she noticed a bruise on her arm, she worried about leukemia; a tingling in her foot set off worries about multiple sclerosis; and painful joints triggered fears about arthritis. She frequently saw her physician for tests to rule out threatening diagnoses. She worried almost every day about her health. Her father died at age 57 after two years of difficult cancer treatment (she was 23). This situation was especially interesting because Margot was a respected physician in the community, showing that medical knowledge may not protect against health anxiety.*

### Somatization Disorder and Undifferentiated Somatoform Disorder

The DSM-IV-TR criteria for somatization disorder are very stringent and require a history of many physical complaints beginning before age 30 that continue over several years and that result in treatment being sought or in significant impairment in functioning. The individual must report an extensive pattern of physical symptoms including at least four pain symptoms (related to four different sites or functions), two gastrointestinal symptoms, one sexual symptom, and one pseudoneurological symptom. The criteria for undifferentiated somatoform disorder are similar to those for somatization disorder but are much less stringent. The individual has to report only one or more physical problems lasting at least six months. In epidemiological studies (described below) the rates of somatization disorder meeting full DSM-IV-TR criteria are very low, while the rates of undifferentiated somatization disorder are much higher.

*Undifferentiated somatoform disorder: Martin, a 48-year-old pipefitter, sought treatment for tinnitus (ringing in the ears). He was exposed to a loud noise in the workplace when a coworker struck a pipe with a hammer when Martin's ear was close to the pipe. There was pain in the ear at first but after a few minutes it dissipated and he continued with the work. He recalls hearing a faint ringing in the background. His ear felt blocked in the days before the incident and he thought it might be a wax buildup. He tried clearing the ear himself and when this was not successful, he saw his physician. When a decongestant did not help, he was referred to an ear, nose, and throat specialist. After an examination, she mentioned she would order an MRI to rule out the possibility of a tumor. He had to wait several weeks for the test and he found he was intensely worried about having a brain tumor. The ringing in his ears became much more intense at this time and he had difficulty concentrating and sleeping. He was relieved when he heard the results of the MRI were normal but found the problem with tinnitus was now severely distressing. He tried a number of treatments, including massage and acupuncture, without relief. An expensive hearing aid with a masking tone*

*helped somewhat. At the point of the assessment, months later, he was completely preoccupied with the tinnitus and desperate to eliminate the symptom.*

### Pain Disorder

In recent years there has been an increasing interest in the association between anxiety and pain. High levels of anxiety symptoms have been reported in individuals seeking treatment for chronic pain (Asmundson, Norton, & Norton, 1999; Asmundson, Norton, & Veloso, 1999). Furthermore, recent studies have identified high levels of anxiety and depression diagnoses in chronic pain patients (Dersh, Polatin, & Gatchel, 2002; Hadjistavropoulos, Owens, Hadjistavropoulos, & Asmundson, 2001). Various anxiety measures predict disability and negative affect at follow-up after treatment for chronic pain (Hadjistavropoulos, Asmundson, & Kowalyk, 2004). We have found that pain often serves as a trigger for higher levels of health anxiety among clients with hypochondriasis.

DSM-IV-TR describes pain disorder as follows:

> The essential feature of Pain Disorder is pain that is the predominant focus of the clinical presentation and is of sufficient severity to warrant clinical attention (Criterion A). The pain causes significant distress or impairment in social, occupational, or other important areas of functioning (Criterion B). Psychological factors are judged to play a significant role in the onset, severity, exacerbation, or maintenance of the pain (Criterion C) (p. 498).

Clearly, this is a very broad diagnostic category and it could apply to many individuals.

*Pain disorder: Kyle was a 38-year-old shipper-receiver with an electronics company. He had worked in the warehouse for many years and now had a position that involved processing orders and required no heavy lifting. Back pain had been a problem for him for ten years. It occurred intermittently and generally improved with conservative treatment. During a flair-up he was preoccupied by pain and experienced intense worry that the pain would continue indefinitely and ruin his enjoyment of life. At these times he withdrew from many of his leisure activities and spent a great deal of time caring for his back with massages, hot baths, and rest. His wife was concerned about his preoccupation and worry about the pain.*

## Anxiety Disorders

Health anxiety is prominent in many clients with anxiety disorders, although it is more common in some disorders than others. Individuals with *panic disorder* frequently fear they will faint, collapse, or die as a

result of the panic attack or suffer some other medical catastrophe. They are often concerned that the symptoms experienced during panic attacks and other anxiety episodes indicate a serious health problem. In a study in our clinic (Furer, Walker, Chartier, & Stein, 1997), 48% of panic disorder patients also met the criteria for hypochondriasis, as compared to less than 5% with social anxiety disorder.

Concerns about health or about the health of family members are often part of a broader pattern of worrying in GAD. Starcevic, Fallon, Uhlenhuth, and Pathak (1994) found that 18% of their sample of patients with GAD met criteria for hypochondriasis, while 50% of patients with panic disorder met the criteria for this problem. Individuals with GAD reported worries about a broad range of issues including family (61%), finances (57%), jobs and work (41%), and health/illness (31%). Participants in the GAD group scored lower than those in the panic disorder group on most of the scales of a dimensional measure of hypochondriasis.

Fears of contamination and of the health impacts of contamination (with bacteria, viruses, or some other harmful agents) are common in OCD. Individuals with this problem may go to extreme lengths to protect their health and the health of loved ones. There are overlaps in the checking and reassurance-seeking behaviors in individuals with OCD and those with hypochondriasis.

Some individuals whose symptoms do not meet full criteria for hypochondriasis, somatization disorder, or undifferentiated somatoform disorder display a pattern of symptoms that would meet the criteria for *specific phobia* of illness, death, or some specific outcome such as vomiting, choking, or fainting. For many individuals, these conditions can be very disabling.

Individuals with *post-traumatic stress disorder* (PTSD) often have very high levels of concern about their physical safety and about their health. In some cases, health- or treatment-related events (such as surgery, a stay in the intensive care unit, or a heart attack) are triggers for an episode of PTSD or related patterns of anxiety and depression (Tedstone & Tarrier, 2003). Concerns about health or future health-related events may be a prominent part of the overall picture.

## Mood Disorders

Illness fears and disease conviction are often seen in individuals presenting for treatment of major depression. In some cases these characteristics develop as part of the onset of the depression, and in other cases they precede the development of depression. Demopulos et al. (1996) reported more substantial hypochondriacal concerns in 100 depressed outpatients

than is typically found in healthy control samples. Only 2% of the depressed patients met full criteria for hypochondriasis, however. Studies of patients in primary care and specialty settings (reviewed by Noyes, 2001a) have found higher levels of depression, anxiety, and somatic symptoms among patients with high levels of hypochondriasis.

### Adjustment Disorder

A specific stressor may lead to an increase in anxiety concerning health.

*Adjustment disorder after witnessing a death: Calvin, a 15-year-old student, was strong in both academics and sports. At one of his football games, a boy on the other team left the field after a shouting match with another player and collapsed at the bench. An ambulance crew worked on the boy but he could not be revived. It was later revealed that he had an undetected heart condition. At first it did not seem that Calvin was very shaken by the death, but two weeks later he noticed he was having difficulty breathing and suddenly became concerned he might die. Headaches caused worries about a brain aneurysm and chest pains caused concerns about having a heart attack. He checked the Internet frequently to search for the causes of his symptoms. Getting to sleep was difficult due to his fear of dying during his sleep.*

### Delusional Disorder

The description of hypochondriasis in the DSM-IV-TR manual indicates that:

> In hypochondriasis, the disease conviction does not reach delusional proportions (i.e., the individual can entertain the possibility that the feared disease is not present), as opposed to somatic delusions that can occur in psychotic disorders (e.g., Schizophrenia, Delusional Disorder, Somatic Type, and Major Depressive Disorder, With Psychotic Features) (p. 507).

Hypochondriacal beliefs may be seen in a variety of psychotic disorders. As with OCD, some individuals move from the level of disease conviction seen in hypochondriasis to the higher level of belief seen in delusional disorders.

## HEALTH ANXIETY IN THE COMMUNITY

Noyes et al. (2000) describe a community study of illness fears in a random sample of 500 residents in a midwestern US county. Respondents were asked a series of 14 questions about illness fears, fears of medical

care, fears of blood or needles, and fears of aging or death. Five percent of respondents reported much more nervousness than most people in relation to at least four of six illness/injury items, 15% indicated that nervousness related to these items caused them to seek medical care sooner or more often, 4% indicated that such fears interfered with obtaining medical care, and 5% reported some other negative effect of these fears on their life.

Rief et al. (2001) also asked about health worries in their study of somatic symptoms in 2,050 residents of Germany. One item asked, "Are you afraid or convinced that you have a serious disease, but doctors do not find a sufficient explanation?" (p. 596). Eleven percent of females and 8% of males answered yes to this question, with a higher rate of endorsement by those 46 years and older. The study also included the 14 items of the Whitely Index (Pilowsky, 1967), a widely used measure of hypochondriacal concerns. Responses to these items (shown in Table 1.1) indicate that a variety of different health concerns and worries was very common in this community sample.

**Table 1.1.** Frequency of Hypochondriacal Features in the General Population

| Whiteley Index Item | Percent Yes |
|---|---|
| 1. Do you often worry about the possibility that you have a serious illness? | 17 |
| 2. Are you bothered by many pains and aches? | 11 |
| 3. Do you find that you are often aware of various things happening in your body? | 35 |
| 4. Do you worry a lot about your health? | 29 |
| 5. Do you often have the symptoms of a very serious disease? | 10 |
| 6. If a disease is brought to your attention (through the radio, TV, newspaper, or someone you know), do you worry about getting it yourself? | 21 |
| 7. If you feel ill and someone tells you that you are looking better, do you become annoyed? | 10 |
| 8. Do you find that you are bothered by many different symptoms? | 11 |
| 9. Is it hard for you to forget about yourself and think about all sorts of other things? | 7 |
| 10. Is it hard for you to believe the doctor when he tells you there is nothing to worry about? | 16 |
| 11. Do you get the feeling that people are not taking your illness seriously? | 8 |
| 12. Do you think that you worry about your health more than most people? | 11 |
| 13. Do you think there is something seriously wrong with your body? | 15 |
| 14. Are you afraid of illness? | 4 |

Source: Adapted from Rief et al. (2001), Somatization syndrome and hypochondriacal features in the general population, *Psychosomatic Medicine, 63*, 595–602. Reprinted with permission.

## SOMATOFORM DISORDERS IN THE COMMUNITY

Hypochondriasis and other somatoform disorders have not usually been included in large-scale studies of mental disorders in the community. This may be due to the limited research focussed on somatoform disorders and the broad range of disorders assessed in these surveys. Specific fears of illness and death are also not included in the list of common fears assessed in the Composite International Diagnostic Interview (CIDI) used in most recent epidemiological studies (e.g., Cox, McWilliams, Clara, & Stein, 2003). As noted above, the number of cases identified is strongly related to the restrictiveness of the diagnostic criteria and the specific definitions applied. Clearly, however, the conditions that are frequently comorbid with hypochondriasis, particularly anxiety and depressive disorders, are very common in the community.

The most comprehensive community study to date of the epidemiology of somatoform disorders was carried out by Faravelli et al. (1997) in Florence, Italy. A random sample of 800 residents of two health districts was identified and 84% agreed to participate in a structured interview (using DSM-III-R criteria, American Psychiatric Association, 1987). Several unique features of this study make it particularly important. The structured interviews were carried out by physicians providing services to these catchment areas. These physicians had access to the health records of the participants and were allowed to carry out further investigations to rule out organic causes of symptoms. Among the respondents, 32% reported physical symptoms explainable by medical pathology, and 33% reported physical symptoms apparently not due to organic factors. The mean number of physical symptoms reported by respondents with symptoms but no demonstrable somatic illness was 6, and those with a physical illness reported an average of three symptoms. The study found one-year prevalence rates of 4.5% for hypochondriasis, 0.7% for somatization disorder, 13.8% for undifferentiated somatoform disorder, 0.6% for somatoform pain disorder, 0.3% for conversion disorder, and 0.7% for body dysmorphic disorder. In this sample, a high proportion of those meeting the criteria for somatoform disorders were female. The rate of mood and anxiety disorders was three to four times higher among those with hypochondriasis, compared to the overall population.

Escobar, Rubio-Stipec, Canino, and Karno (1989) have suggested an abridged measure of somatization, the Somatic Symptom Index (SSI). This index is composed of 38 somatic symptoms. The authors suggest a cut-off score for *abridged somatization* of four symptoms for males and six for females (some symptoms apply to females only). In an epidemiological sample, this construct had similar risk factors, service use patterns, and

disabilities to those traditionally associated with the full somatization disorder diagnosis, while having a much higher prevalence. Rates of 4.4% were reported in Los Angeles, compared to 19% in Puerto Rico, with the dramatic difference in rate being attributed to cultural and socioeconomic factors.

A national survey in Germany (Jacobi et al., 2004) described the rates of mental disorders among adults 18–65 years of age. The CIDI interview included an assessment of the 12-month prevalence of selected somatoform disorders, including abridged somatization (4.3%), somatoform pain disorder (8.1%), and any somatoform disorder (11%). Somatoform disorders were twice as common among women. Somatoform, anxiety, and substance disorders had an early age of onset: half of current cases had onset by age 20. Poor health status (presence of physical illness) was strongly associated with all mental disorders. This study had the advantage of clinically trained interviewers (rather than the lay interviewers used in most studies) and extensive data on physical health status.

## SOMATOFORM DISORDERS IN HEALTH CARE SETTINGS

Escobar and colleagues (Escobar, et al. 1998; Escobar, Waitzkin, Silver, Gara, & Holman, 1998) studied somatoform disorders in a large sample of patients ($N = 1{,}456$) attending a university-based primary care clinic in California. The participants were from diverse socioeconomic backgrounds and the sample included primarily US-born Caucasians, US-born Latinos, and patients born in Mexico and Central America. They found rates of hypochondriasis at 3.4%, somatization disorder at 1.4%, and abridged somatization disorder at 22.0%. Hypochondriasis and abridged somatization were frequently comorbid. Both diagnoses had lifetime rates of depressive and anxiety disorders twice as high as those without somatoform diagnoses.

The *World Health Organization Collaborative Study on Psychological Problems in General Health Care* (Ormel et al., 1994) collected information on a very large group of patients (over 25,000) attending primary health care facilities in 15 centers around the world. The one-month prevalence rates for some of the ICD-10 diagnoses considered were: depressive episode 10.5%, GAD 7.9%, panic disorder 1.1%, hypochondriasis 0.8%, and somatization disorder 2.8%. Moderate to severe disability was found in four to five times as many patients with a definite psychiatric disorder, compared to those without such a diagnosis. Disability was assessed by interviewer rating of occupational role dysfunction, self-rating of physical disability, and report of disability days in the last month. In contrast to the

strong relationship between disability and psychiatric disorder, physician-rated physical health and the number of subject-reported chronic medical conditions were weakly correlated with the disability measures. This finding of a stronger relationship between psychiatric disorder and disability than between physical health problems and disability has been noted consistently in primary care settings (Ormel et al., 1994).

Gureje, Ustun, and Simon (1997) considered how the application of the criteria for the diagnosis of hypochondriasis influenced the estimate of prevalence of the disorder. Overall, 6.7% of respondents reported having a persistent belief (of at least six months' duration) of the presence of a serious physical disease or a persistent preoccupation with a presumed deformity. The proportion meeting the criteria dropped to 3.0% with the requirement that there be persistent distress or interference with functioning. When the criterion of seeking medical help was added, the prevalence dropped to 2.2%. The final criterion, that the respondent refused to accept medical reassurance that the symptoms had no physical causation, reduced the prevalence to 0.8%. The authors then considered an abridged definition of hypochondriasis that did not include the last criterion. Hypochondriasis (complete and abridged) was equally common among males and females and among those with anxiety and mood disorders. Respondents who met the abridged criteria were similar in their level of disability to those who met the full criteria. This finding that some individuals with persistent worry about having a serious illness *do* respond to medical reassurance fits well with our experience in treating this problem. However, the effects of reassurance are often temporary and worry arises again with the emergence of new or renewed symptoms.

## CONCLUSION

Concern about health is common in our culture and health issues are widely covered in the media. The experience of somatic symptoms is frequent at all ages, as are events that may trigger health anxiety. Community and primary care studies indicate that problems with somatization and fears related to illness and death are widespread and are associated with a range of anxiety and mood disorders. Health anxiety drives increased health care utilization and related costs. Mental disorders, including those with prominent health anxiety, are more strongly related to disability than physical health status. Disability and the associated losses in productivity have very important economic impacts in our society. We are just beginning to understand the extent of problems with health anxiety and how we can cope with these problems most effectively.

CHAPTER 2

# ETIOLOGICAL FACTORS

There has been considerable speculation over the years about the etiology of health anxiety and somatization and it is only in recent years that more solid evidence has become available. Clients with health anxiety often wish to understand why their problem developed. Clinicians find that having an understanding of the development of a problem is helpful in developing interventions. Researchers study etiology in order to develop more effective approaches to treatment and, ultimately, prevention. Fortunately, what we have learned from the extensive research about the etiology of mood and anxiety disorders is helpful in our understanding of health anxiety. There is also a developing literature looking specifically at the etiology of health anxiety and somatization.

A number of etiological factors have been the focus of research: genetic factors, family background and childhood experiences, stressful life events, and sociocultural factors.

## GENETIC FACTORS

The findings of large-scale genetic studies of mental disorders have increased our understanding of the familial transmission of behavioral characteristics associated with mental disorders. A group working with the Virginia Twin Study (Kendler et al., 1995) found a significant genetic contribution to dimensional measures of somatization and panic-phobia.

The latter factor is often closely related to health anxiety. The genetic effects were significant for both factors, accounting for between 25% and 49% of the total variance. Familial environment effects were absent for symptoms of somatization, and for symptoms of panic-phobia they accounted for only a very small proportion of the variance in males and a modest proportion in females. The authors indicate that their findings were consistent with previous genetic studies that suggest that environmental effects on behavioral traits arise from environmental experiences not shared by other family members.

Gillespie, Zhu, Heath, Hickie, and Martin (2000) describe a study examining the Australian Twin Register. Information was gathered from 3,469 respondents (age 18–28) using dimensional measures of anxiety, depression, and somatization. Multivariate genetic analysis indicated that an additive genetic and non-shared environment model best explained the covariation among the three factors. The genetic factors accounted for approximately 30% of the variance in somatization scores. Approximately 10% of the genetic variance was due to a specific factor for somatization not overlapping with genetic contributions to anxiety and depression. They also estimated that 74% of the individual environmental influence on somatization was unrelated to depression or phobic anxiety. These results were similar to previous findings that there are unique genetic and environmental factors associated with symptoms of chronic fatigue (Hickie, Kirk, & Martin, 1999).

## FAMILY BACKGROUND AND CHILDHOOD EXPERIENCES

Noyes, Holt, Happel, Kathol, and Yagla (1997) recruited 19 families of probands with hypochondriasis and 24 families of probands without hypochondriasis. There were few differences between the groups in frequency of lifetime psychiatric diagnoses, except there were higher rates of abridged somatization (18.1% vs. 10.3%) and generalized anxiety disorder (9.7% vs. 3.1%) among family members of probands with hypochondriasis. The family members of probands with hypochondriasis did not have a significantly higher rate of hypochondriasis (12.5% vs. 9.3%) but current anxiety disorders were more common (26.4% vs. 15.5%). The family groups did not differ on dimensional measures of hypochondriacal concern. Relatives of hypochondriacal probands reported a less favorable attitude toward doctors, poorer response to treatment, and less satisfaction with health care. They scored lower on personality dimensions of agreeableness and conscientiousness and higher on the alexithymic dimension (difficulty expressing feelings). There were no statistically

significant differences between the groups in terms of medical history. The findings of this study do not suggest that hypochondriasis runs in families, although they do indicate a possible family association in terms of anxiety disorders, somatization, and certain personality characteristics.

In an extension of this study, Noyes, Happel, and Yagla (1999) described the childhood experiences of a non-clinical sample of relatives who met full ($n = 16$) or possible ($n = 5$) criteria for hypochondriasis in comparison to the experience of relatives who did not meet the criteria ($n = 145$). Those with hypochondriasis reported significantly higher levels of poor physical health (22.2% vs. 3.3%) and phobia (50% vs. 19.2%) during childhood. A number of other childhood experiences were at least twice as common among those with hypochondriasis (serious illness or injury, restricted activity due to health problems, parental neglect, and sexual abuse), but these differences did not reach statistical significance, possibly because of the limited sample size.

The South London Somatization Study in England considered the influence of early life experience on somatization (Craig, Boardman, Mills, Daly-Jones, & Drake, 1993). All patients presenting in primary care for the first time with a recent health concern were screened for psychiatric symptoms and health problems. Participants were divided into four categories: Physical (physical disorder only, $n = 90$), Psychologizers (psychiatric disorder presenting with psychological complaints, $n = 11$), Somatizers (psychiatric disorder presenting with physical complaints but functional diagnosis only, $n = 44$); and Mixed (psychiatric disorder presenting with physical complaints with resulting organic diagnosis, $n = 39$). The Somatizer group reported considerably higher levels of physical illness before the age of 17 (55% vs. 15 to 20% in the other groups), parental illness before the age of 17 (41% vs. 9 to 23% in the other groups), and lack of parental care (34% in Somatizer group, 36% in Psychologizer group, below 14% in other two groups). Events involving loss without lack of parental care were reported at a rate of 18–20% in the three groups with psychiatric disorder but only 11% of those with physical disorder. Participants were followed over time and the authors found that those with Physical or Mixed disorders recovered more quickly from the presenting complaint, while the Somatizers improved more slowly. At follow-up, 36% of the Somatizer group continued to experience the index symptoms and 27% now met the criteria for some type of somatoform disorder (four had somatization disorder, six hypochondriasis, four undifferentiated somatoform disorder, and two functional pain disorder). Logistic regression analyses indicated that there were independent contributions to somatization from childhood illness and lack of care (caused at times by parental illness).

Craig, Cox, and Klein (2002) recruited groups of mothers with children ageing from four to eight. The Somatizer group ($n = 48$) consisted of mothers with chronic symptoms typical of undifferentiated somatoform disorder (most commonly cardiovascular, gastrointestinal, neurological symptoms, and pain symptoms affecting one or two body systems). The Organic group ($n = 51$) included mothers with chronic health conditions such as arthritis, diabetes with complications, poorly controlled epilepsy, and asthma. The Healthy group ($n = 52$) was recruited in the same health care setting from a random sample of women who did not have any chronic health condition. The Somatizer group reported higher levels of health anxiety and more difficulty in accepting their illness than the Organic group. Mothers in the Somatizer group reported higher levels of childhood adversity than those in the other two groups, including lax supervision, parental indifference, physical abuse, and sexual abuse. The Somatizer group also reported substantially more experiences with illness before age 17 (family members or their own).

This study also gathered information from the mother on the health of the child. Mothers in the Somatizer group were more likely to regard their child as "sickly" as an infant than those in the other two groups (25% vs. 9%) and reported more physician visits for their child in the previous year (7.4) than the other two groups (in the range of four visits). Children of mothers in the Somatizer group were more likely to have missed some school due to illness during the previous term (70% vs. 45%). Among those whose children missed school, mothers in the Somatizer group were less likely than those in the other two groups to describe objective signs of illness, such as fever, and more likely to describe vague symptoms, such as looking unwell or being lethargic (36% vs. 11%). Reports of children's symptoms during the previous three months indicated that children of the Somatizer group did not have more common childhood infections but they did have a substantially higher number of symptoms often seen as functional—headaches, stomachaches, other pains, and fatigue. The authors explored which factors might be related to children's worries about health and somatic expression of emotion and found that the mother's somatization status, organic health problems, and history of childhood adversity were clear predictors.

Barsky, Wool, Barnett, and Cleary (1994) screened patients attending a general medical clinic and identified 60 patients with hypochondriasis and 60 without. Those with hypochondriasis were more often females and had lower socio-economic status, and reported more adverse experiences before age 17: major upheaval between parents (28.6% vs. 9.1%), traumatic sexual experience (28.6% vs. 7.3%), and being a victim of violence (32.1% vs. 7.3%). The group with hypochondriasis also reported

a higher frequency of often being sick during childhood (33.3% vs. 8.3%) and missing school because of health problems (53.3% vs. 16.7%). The groups with and without hypochondriasis did not differ in the severity of current health problems.

The National Survey of Health and Development in Great Britain provides longitudinal data on a cohort born in 1946 and permits evaluation of childhood risk factors for medically unexplained symptoms in adulthood (Hotopf, 2002; Hotopf, Mayou, Wadsworth, & Wessely, 1999). At age 36, participants with abridged somatization ($n = 191$) were compared to the remainder of the sample ($n = 3107$). Abridged somatization was associated with lower education, the presence of psychiatric disorder, and being widowed, divorced or separated. The longitudinal data showed a strong association between abridged somatization and ratings of the mother's and father's health when the respondent was aged 15 and persistent abdominal pain during childhood, but not serious physical disease during childhood. Watt and Stewart (2000) investigated the relationship between childhood learning experiences and elevated hypochondriacal concerns among college students. The Learning History Questionnaire, Revised (Watt, Stewart, & Cox, 1998) gathered data on childhood sick-role experiences/somatic symptoms and observation of parental sick-role/somatic symptoms. Respondents with higher levels of hypochondriacal concerns reported increased experiences in both these areas.

The results of these studies suggest relationships between childhood experiences, particularly adverse events, and health anxiety and somatization during adult years. There are some differences in findings among the studies that may relate to differences in samples and dependent measures. The evidence for poor subjective health of parents and poor subjective health during childhood as risk factors for adult somatoform disorders seems quite convincing. Lack of parental care (possibly due to parental illness or life stress) was found to be a strong factor in one study. The research on particular parenting styles and health anxiety and somatization is limited at this point (Craig, Bialas, Hodson, & Cox, 2004).

## STRESSFUL LIFE EVENTS

The South London Somatization Study described above considered the impact of stressful life events as an adult and the issue of secondary gain (Craig, Drake, Mills, & Boardman, 1994). The study used the Life Events and Difficulties Schedule (Brown & Harris, 1978), to evaluate the qualitative aspects of stressful experiences in the context of an individual's life

situation. In the 38 weeks before the interview, severe life events were more common in the Somatizer (59%) and Psychologizer (64%) groups, than in the Physical (18%) or Healthy Control (16%) groups. A similar pattern was seen for major life difficulties. Many of these events and difficulties were judged to have secondary gain potential. Those in the Somatizer group were less likely to use active problem-solving efforts to deal with stressful events and major difficulties than non-somatizers (those in the Psychologizer or Physical groups). The authors noted that these findings were similar to their previous findings concerning the association between stressful life events, anxiety, and major depression.

In a study in a Veterans Affairs primary care clinic, Stein et al. (2004) considered the relationship of sexual assault history to somatic symptoms and health anxiety in women. They found that a history of sexual assault was related to higher levels of somatic symptoms, health anxiety, sick days, and health care utilization. McNutt, Carlson, Persaud, and Postmus (2002) studied the relationship between childhood physical and sexual abuse, past physical and sexual intimate partner violence, and recent emotional, physical, and sexual intimate partner violence. Multiple nonspecific somatic symptoms were reported much more frequently by those with abuse experiences.

Hotopf, Mayou, Wadsworth, and Wesseley (1998) report a longitudinal study of participants in the National Survey of Health and Development. Six physical symptoms were considered: arthritis and rheumatism, backache, chest pain, dizziness, headache, and abdominal pain. Mental health problems at age 36 were strong predictors of the emergence of each of the new symptoms at age 43, except for arthritis and rheumatism. Back pain, abdominal pain, and chest pain at age 36 were all associated with an increased likelihood of new-onset psychiatric symptoms at age 43. Higher levels of symptoms at age 36 indicated a higher risk of new symptoms or mental health problems at age 43.

Research is consistent in showing higher levels of health anxiety and somatic symptoms among those with higher levels of stressful life events. This finding is similar to the extensive body of research on the etiology of anxiety and depression (Dohrenwend, 1998; Mazure, 1995).

## SOCIO-CULTURAL ASPECTS OF SOMATIZATION AND HEALTH ANXIETY

Parents and other specialists in child development have often noted that somatic symptoms are a common way in which children experience and express problems. Children typically report stomachaches, headaches,

and other symptoms when they are confronted with difficult situations. Avoidance is a natural way to attempt to cope with challenging circumstances. The development of the concept of the sick role in sociology (Segall, 1997) has helped to broaden our understanding of common expectations concerning health and illness. Parsons (1951) had a strong impact on the sociological understanding of illness behavior through his description of the sick role. He described the rights and duties conferred on individuals in the sick role and the impact on their functioning in society. In Parson's view, the sick role was conferred on the individual by a medical practitioner. Segall described later criticisms of Parson's concept of the sick role as being overly medicalized and argued for a broader view of health behavior. A great deal of the assessment and management of sickness takes place outside the formal health care system and, in fact, the most common forms of health care are self-care and care by members of the individual's support system. Segall suggests that:

> A sick role concept would consist of the following rights: the right to make decisions about health-related behavior (Right 1), the right to be exempt from performing usual well roles (Right 2), and the right to become dependent on lay others for care and social support (Right 3) . . . [The] sick role concept would also consist of the following duties: the duty to maintain health and overcome illness (Duty 1), the duty to engage in routine self-health management (Duty 2), and the duty to make use of a range of health care resources (Duty 3). (p. 297)

These expectations vary depending on the nature and severity of the illness (exemption from some versus all responsibilities) and its duration (temporary vs. permanent). Some individuals rely heavily on the health care system in negotiating these rights and duties, while others rely on their own resources and those of their social system. Given that so much happens outside the formal health care system, it is very important to understand the beliefs (and theories) about the health conditions that guide decision-making and health (or illness) behavior. While most people will move into the sick role when dealing with episodic bouts of illness (a severe cold or back pain, for example), for some individuals the sick role becomes central for extended periods of time. Patients' beliefs about their role in coping with their health problems will be influenced by their experience with, and understanding of, the sick role. For some individuals, the sick role may be a way of escaping from stressful situations or from difficult life problems. Others have ways of managing symptoms that minimize the impact on their everyday life.

Our society looks to medical practitioners to provide information and advice concerning the sick person's rights and responsibilities. A physician's

recommendation is frequently sought concerning an appropriate course of assessment and treatment. The physician is often required to provide information concerning an individual's request to be excused from work responsibilities. Many sources of assistance for those who are ill (unemployment or disability income, home care) require the recommendation of a physician. Finally, input from the physician is frequently requested concerning whether the patient is caring for the health problem so as to return to a state of good health.

## INDIVIDUAL BELIEFS CONCERNING ILLNESS AND HEALTH CARE

Typical medical assessments emphasize the evaluation of signs and symptoms related to the problem and how they have evolved over time. Little time may be spent on the person's thoughts and beliefs about the problem. Behavioral scientists who have studied health and illness behavior argue that the patient's understanding is crucial in determining their reaction and later their response to treatment (Leventhal, Meyer, & Nerenz, 1980). For example, Howard Leventhal's *common sense model of health and illness behavior* "places the process of symptom perception in the context of self-regulatory behavior. Symptoms often elicit fear and anxiety, leading the sufferer to engage in ameliorative behaviors. Simultaneously, the layperson evaluates the set of symptoms and develops a naïve theory (or common-sense model) of what the symptoms mean and how best to respond" (Martin, Lemos, & Leventhal, 2001, p. 27). Often the patient's understanding of the problem is different from the physician's, which may result in coping behavior that conflicts with medical recommendations. Evaluating the patient's beliefs about the problem and what best to do about it will help the clinician to develop appropriate interventions (Salmon, Woloshynowych, & Valori, 1996).

Woloshynowych, Valori, and Salmon (1998) carried out a qualitative and quantitative study of patients' expectations when attending primary care clinics in England. Interviews before the physician visit indicated that patients had a wide range of beliefs about the etiology of their symptoms, with many patients seeing stress and lifestyle as major factors. When patients were asked what responses from the physician would be helpful, the most frequently identified areas of help were: having the physician explain what is wrong (73%), talking about the symptoms (55%), medication (51%), changing diet or lifestyle (32%), seeing a specialist (30%), having tests (28%), and an operation (8%). The response expected most frequently is that of

obtaining an explanation of the symptoms (and possibly reassurance about their management).

Peters, Stanley, Rose, and Salmon (1998) studied the beliefs of patients with medically unexplained symptoms concerning their problem and the appropriate medical response. Respondents had physical symptoms that persisted for at least one year and remained unexplained, despite specialist referral and investigation. Symptoms were mainly pain (localized or extensive) and fatigue, but also included bowel problems, respiratory problems, dizziness, sweating, and nausea. This was a group with severe difficulty (due to the duration of the problem) and a high level of health care utilization. The interviews with 68 patients used open-ended questions and explored current symptoms; history of illness, medical investigation, and treatment; explanations of symptoms; and perception of the doctor's role. Few patients received explanations of symptoms that satisfied them and, consequently, their understanding was fluid. Medical terms and ideas did not dominate among the patients' explanations and four non-medical themes were reported most frequently: (a) a malicious, autonomous disease entity which could come and go, causing increases and decreases in symptoms; (b) social influences, such as the stress of a job, a relationship, or a family problem; (c) internal imbalance, such as excessive or inadequate strength in any of a variety of bodily systems (e.g., a chemical imbalance, making too much adrenaline, immune system problems, doing too much thereby causing an imbalance); and (d) nervous and psychological mechanisms emphasizing internal factors (nerves, thinking too much) rather than external factors (such as stress). Respondents generally felt that only they could understand their symptoms because only they could feel the symptoms. In contrast, doctors were portrayed as relying on what they could see and demonstrate with imperfect techniques. Negative investigations were interpreted as a failure to reveal the problem. Patients gathered information about their symptoms from a variety of sources and compared different providers in terms of their management. They frequently criticized the competence of doctors in applying their limited knowledge, and often saw doctors as denying the reality or the importance of the symptom, and this produced a negative reaction. Patients were also quite prepared to reject a doctor's advice if it did not fit with their understanding of the problem and what was needed to treat it.

The analysis summarized what the patients wanted from their doctors. First, patients wanted to have a name for the problem and reassurance that it was not life-threatening. Unknown and unnamed problems contributed to anxiety. Second, some patients wanted a

simple explanation of the problem. Finally, some patients appreciated seeing the doctor's engagement in the problem, even if there was not a solution.

This team then examined patients' perceptions of the medical explanations they received (Salmon, Peters, & Stanley, 1999). Three patterns of medical explanation were identified. The first one was described as *rejection*. Most commonly this occurred when the patient's perception was that negative test results were taken by the physician to indicate that nothing was wrong. A diagnosis of anxiety or depression was often assumed to mean that the symptoms were unjustified or imaginary. The second pattern was described as *collusion,* where the doctor was seen as agreeing to an explanation offered by the patient. In some of these cases, the patient questioned the doctor's competence. The third pattern was described as *empowerment*. The physician was seen as providing a tangible explanation that removed any sense of blame and provided the patient with opportunities for self-management. The authors suggested that this empowering approach fit well with the reattribution approaches used in some models of medical consultation and cognitive behavior therapy.

Another study by this group considered whether patients pressure primary care providers to pursue somatic treatment. The study analyzed audiotaped interactions between 36 patients and their physicians concerning unexplained medical symptoms (Ring, Dowrick, Humphris, & Salmon, 2004). Ten patients made a specific request of the physician (one for physiotherapy, four repeat prescriptions, six new prescriptions, and five sick notes). While none of the patients asked for investigation or medical referral, all but one presented their problem in ways that could put pressure on the physician to take additional action. Twenty-four reported how their symptoms impaired normal activities or social behavior and 22 used very emotive language to describe the difficulty caused by their symptoms. Nineteen suggested physical explanations for their symptoms of a general nature (e.g., gas) or a more specific nature that would require some response from the physician (e.g., ulcer, pleurisy, arthritis), but these were presented as proposals for discussion rather than firm beliefs. Sixteen patients cited other people, usually family members, as authority for the reality and severity of the symptoms and the need for medical attention. No patient explicitly contradicted the doctor, but 17 negated in indirect ways the physician's attempts to explain or manage the symptoms and, in particular, to exclude disease. Some offered alternative diagnoses or emphasized the ineffectiveness of previous treatments. Another factor that was challenging for the physician was the number of different symptoms presented (21 patients presented at least 3) and the complex temporal patterning of the symptoms. In spite of the low level of requests

for somatic interventions, 27 patients received these, including further investigation (12), specialist referrals (4), sick notes (5), psychotropic drugs (5), and physiotherapy (1). The authors suggested that many of these interventions were not likely to be helpful and that primary care providers could use assistance in developing alternative responses to the problems presented by patients with medically unexplained symptoms. Further analysis of patient–physician interactions in this sample indicated that the majority of patients presented information that could have led to a discussion of the link between the symptoms and life stress or anxiety/depression (Salmon, Dowrick, Ring, & Humphris, 2004).

## CROSS CULTURAL FACTORS

Escobar and his colleagues studied somatization in Los Angeles and Puerto Rico (Escobar et al., 1989). The prevalence of abridged somatization was more than four times higher in Puerto Rico (20% in females and 18% in males) than in Los Angeles (4.4%). On most measures, the Mexican-American participants in Los Angeles fell midway in their responses between the Puerto Rican respondents and non-Hispanic individuals in Los Angeles.

Cultural differences were the focus in *The World Health Organization Collaborative Study on Psychological Problems in General Health Care* (described in Chapter 1). This study included urban, primary care clinics in 15 cities: Ankara, Turkey; Athens, Greece; Bangalore, India; Berlin, Germany; Gronigen, Netherlands; Ibadan, Nigeria; Mainz, Germany; Manchester, U.K.; Nagasaki, Japan; Paris, France; Rio de Janeiro, Brazil; Santiago, Chile; Seattle, U.S.A.; Shanghai, China; and Verona, Italy. The authors found that:

> Self-reported current somatic symptoms were strongly and consistently related to current psychological distress. No somatic symptom or pattern of symptoms was specifically associated with symptoms of anxiety or depression. Individual sites had generally similar patterns of association between psychological distress and individual somatic symptoms, although a few symptoms showed considerable variation across study sites. . . . Contrary to expectation, somatic symptoms showed a generally similar pattern of association with psychological distress among North American and Western European patients as among patients in non-Western and developing countries (Simon, Gater, Kisely, & Piccinelli, 1996, p. 487).

This finding was consistent whether they considered all somatic symptoms or only medically unexplained symptoms. In examining reports of specific symptoms, they found that shaking spells were minimally

associated with psychological distress at most sites but were among the most strongly associated in Ankara and Athens. Diarrhea and excessive gas were moderately associated with distress at a number of European sites, but were weakly or even negatively associated in Rio and Santiago. The authors concluded that the findings are consistent with a model of *somatosensory amplification* or heightened symptom sensitivity associated with psychological distress. They also noted that just as distress may cause an increase in somatic symptoms, symptoms may cause an increase in psychological distress. The study did not consider the meaning of symptoms or the anxiety associated with them, factors that may differ across cultures.

This study considered individual symptoms and the association between symptoms and psychological distress. A study from the same group (Gureje, Simon, Ustun, & Goldberg, 1997) considered the rates of somatization disorder and abridged somatization disorder across these settings. ICD-10 somatization disorder was found in a modest number of patients (2.8% across all the centers). Abridged somatization, which has been found to be associated with similar levels of disability compared to the full disorder, was found in 19.8% of patients. Rates of abridged somatization varied widely across the cities, ranging from highs of 45.7% in Santiago and 35.6% in Rio to lows of 7.7% in Athens, 9.7% in Verona, and 10% in Seattle. Most of the remaining cities reported proportions in the range from 15% to 25%. Presence of abridged somatization was associated with lower levels of education and more frequent presence of chronic physical disease. Abridged somatization was associated with a higher number of disability days in the previous month and a higher level of occupational disability, even when controlling for physical health status. About 40% of respondents with this disorder also met criteria for either generalized anxiety disorder or major depression.

Gureje et al. (1997) studied hypochondriacal concerns in the same sample and found somewhat different patterns across the cities involved. The proportion of patients reporting persistent belief in the presence of a serious physical disease or a persistent preoccupation with a presumed deformity, associated with distress or interference with functioning, was much higher in Santiago (12.6%), Berlin (6.9%), and Mainz (5.7%), and much lower in Bangalore (0.2%), Ankara, Manchester, and Shanghai (all 0.8–0.9%), compared to the other cities. As was the case with abridged somatization, hypochondriacal concerns were associated with generalized anxiety disorder and major depression, more impairment in social roles, and higher levels of health service utilization.

Clearly there are large cultural differences in the presentation of somatization and health anxiety, although the strong association with

psychological distress appears to hold across cultures. It is important for clinicians to have a high degree of cultural awareness in dealing with these conditions.

## CONCLUSION

Our understanding of etiological factors in health anxiety and somatization is clearly expanding. There is solid evidence for the role of genetic factors, childhood adversity, exposure to family members with illness, experience of somatization during childhood, and stressful life events in the development of these problems. There is fascinating evidence concerning parental management of childhood symptoms and illness but this area has been less extensively studied. Studies that consider several etiological factors at once and the longitudinal course of somatization and health anxiety are particularly informative.

As a better understanding of multiple etiological factors develops, it will be important to mount studies of the chain of events by which these etiological factors have their influence on health beliefs and behavior. This will assist in developing appropriate strategies for timely and cost-effective intervention. Preventive approaches during childhood and adolescence are likely to be particularly important.

CHAPTER 3

# A COGNITIVE-BEHAVIORAL PERSPECTIVE

Individuals who worry excessively about their health are often given very little information about health anxiety. Physicians or family members may become frustrated by the repeated attempts to gain reassurance about health issues and may see the person as a *complainer*. People who are struggling with health anxiety often feel quite alienated in the health care system. They may feel that their concerns are not taken seriously and may have seen many health care professionals over the years and never received suggestions about how to cope with their symptoms and anxiety. It is important to help clients understand how their health anxiety may have developed and how it is maintained. Models for hypochondriasis and for somatization are relevant in understanding health anxiety.

## HYPOCHONDRIASIS

Barsky (2001b), Barsky and Wyshak (1990), and Kellner (1986, 1987) have published pioneering work outlining models of hypochondriasis. Cognitive-behavioral models of hypochondriasis propose that this disorder involves the tendency to misinterpret bodily symptoms. These models generally emphasize the role of perceptual and cognitive abnormalities with the illness behaviors being viewed as secondary consequences of

these abnormalities. Barsky's somatosensory amplification model of hypochondriasis (Barsky, 2001b; Barsky & Wyshak, 1990) is summarized as follows:

> . . . personally threatening life events prompt predisposed individuals to suspect that they have become ill. This suspicion leads them to selectively attend to benign bodily sensations and health information that confirm their suspicions and to ignore disconfirmatory evidence. Benign bodily sensations are thereby amplified and misattributed to the putative disease, which further substantiates their disease convictions (Barsky & Ahern, 2004, pp. 1464–1465).

Kellner (1986, 1987) stresses the importance of childhood experiences, such as disease in the family, which may sensitize the individual to focus on somatic symptoms. He suggests that full-blown hypochondriasis develops following some kind of stressor that causes anxiety or depression with associated somatic symptoms. The somatic symptoms may also be produced by such mechanisms as overactivity of the autonomic nervous system, increased muscular tension, endocrine activity, and biochemical changes caused by hyperventilation. The change in somatic activity is misinterpreted as an indication of a disease process. Typically, this idea of being seriously ill abates as a result of a physician's reassurance or the disappearance of the symptoms. Kellner and other cognitive theorists argue that if the catastrophizing persists then the person will become more anxious. As anxiety increases so does the person's tendency to focus on somatic symptoms, thus strengthening the fear of disease. In this way, the vicious cycle of hypochondriasis develops.

Perhaps the most frequently cited cognitive model of hypochondriasis is the one proposed by Paul Salkovskis and his colleagues at Oxford University (Salkovskis & Warwick, 1986, 2001; Warwick & Salkovskis, 1990, 2001). Like Kellner, these researchers emphasize the importance of the person's learning history in the development of maladaptive beliefs relating to illness, somatic symptoms, and health-related behaviors. Salkovskis suggests that previous experiences with illness and general negative assumptions about health may predispose an individual to develop health anxiety when combined with a critical, precipitating health event and negative interpretations of this event. He emphasizes that misinterpretations of bodily symptoms or health information can lead to increased physiological arousal and, hence, result in increased physical symptoms. Factors maintaining health anxiety include the tendency for people to selectively focus on information confirming their health fears, the increasing ability of clients to detect small changes in normal physiological processes, and safety-seeking behaviors, including

checking of bodily symptoms, reassurance seeking, and avoidance of feared situations. Although there are clearly behavioral components in this model, including the impact of avoidance and other safety behaviors on anxiety levels, the Oxford group emphasizes the cognitive components, both in descriptions of their model and in treatment applications.

The cognitive-behavioral model for health anxiety overlaps with the cognitive model of panic disorder developed by the Oxford group. These researchers argue that the principal differences between the two disorders are that the feared consequence in panic disorder is immediate (having a panic attack or dying on the spot from a heart attack), whereas the feared consequence in hypochondriasis is delayed (e.g., gradual death from cancer); and that the feared symptoms in panic disorder are symptoms related to physiological arousal (e.g., increased heart rate, shortness of breath, sweating) whereas those feared in hypochondriasis (e.g., lumps, rash, pain) are not typically arousal-related (see Salkovskis & Clark, 1993; Salkovskis & Warwick, 2001). This is not an absolute distinction, however, because concern about acute symptoms and dying suddenly (e.g., from a heart attack or stroke) are also common in individuals with hypochondriasis and there is a high level of comorbidity between panic disorder and hypochondriasis (Furer et al., 1997).

## SOMATIZATION

The primary models proposed to account for the development and maintenance of somatization emphasize learned social behavior, psychophysiological abnormalities, or a combination of these factors. Bertagnolli, Harris, and Arean (1994), for example, suggest that individuals with somatization disorder have difficulty differentiating between physical and emotional arousal. They believe that all their somatic symptoms have a physical basis and, therefore, they tend to seek out frequent medical attention. A vicious cycle develops as the medical consultations lead to increased focus on the bodily symptoms, which results in increased pain and other somatic complaints.

Rief, Hiller, and Margraf (1998) recommend a model of somatization "that integrates cognitive, affective, behavioral, and physiological aspects" (p. 594). These authors propose that cognitive components of the model include misinterpretation of bodily symptoms, the belief that good health is characterized by the absence of somatic symptoms, and a view of the self as weak and unable to tolerate stress. Selective attention to bodily symptoms contributes to these misinterpretations. Beliefs about being weak and ill may lead to avoidance of physical activity. This, in turn, leads

to reduced physical fitness, lack of stamina associated with inactivity, and increased probability that the individual will develop physical problems.

Nezu, Nezu, and Lombardo (2001) outline a similar cognitive-behavioral model for medically unexplained symptoms, emphasizing the role of the physical symptoms, cognitions that exacerbate the physical symptoms, general negative affect, hypervigilance, reassurance-seeking, and reduced activity level. These authors discuss the ways in which various learning mechanisms (including social learning, and operant and respondent conditioning) initiate and maintain the somatization tendencies.

## EVIDENCE IN SUPPORT OF COGNITIVE-BEHAVIORAL FORMULATIONS

### Perceptual Biases

Much of the research examining cognitive-behavioral models of health anxiety has focussed on the perceptual component of the model. It is hypothesized, for example, that people with hypochondriasis tend to experience normal bodily sensations as being more aversive and more intense than others (Barsky, 1979; Barsky & Klerman, 1983; Mayou, 1976). They may have increased awareness of bodily sensations and a lower pain threshold. Psychiatric outpatients with hypochondriasis and general anxiety have been shown to be more accurate in their assessment of heart rate changes than patients with agoraphobia and social anxiety (Tyrer, Lee, & Alexander, 1980). Individuals with hypochondriasis also report awareness of significantly more bodily symptoms than do healthy controls (Haenen, Schmidt, Kroeze, & van den Hout, 1996). Participants with disease phobia appear to have lower tolerance for the experimentally induced pain of electrical shock and lower thresholds for detecting sensation than psychiatric inpatients (Bianchi, 1971). Similarly, individuals with hypochondriasis demonstrated lower tolerance for cold than healthy controls (Gramling, Clawson, & McDonald, 1996). Hanback and Revelle (1978) reported that the visual and auditory sensitivities of participants with hypochondriacal tendencies were generally higher than for those with low scores on a hypochondriasis scale. Similarly, there is some evidence supporting the notion of perceptual biases in individuals with somatization disorder (James, Gordon, Kraiuhin, Howson, & Meares, 1990). These researchers compared 10 individuals who met DSM-III-R criteria for somatization disorder and 10 normal controls with respect to their responsiveness to auditory stimuli of various intensities. The sample

with somatization disorder displayed enhanced central nervous system response to sensory input. Elevated basal levels of physiological arousal and heightened perceptual sensitivity would increase awareness of minor changes in bodily functions and symptomatology.

## Attentional Biases

There is also evidence that focussed attention increases the perception of bodily sensations. Haenen et al. (1996), for example, found that individuals with hypochondriasis reported significantly more bodily symptoms when instructed to concentrate on internal sensations as compared to baseline and to a period of focus on a distracting task. A series of studies with individuals with specific phobia of spiders supports the hypothesis that attention to pain increases the experience of pain, while distraction decreases it (Arntz & De Jong, 1993; Arntz, Dreessen, & De Jong, 1994; Arntz, Dreessen, & Merckelbach, 1991). Similar effects of distraction on pain have been reported for individuals with high and low scores on a measure of hypochondriacal concerns (Lautenbacher, Pauli, Zaudig, & Birbaumer, 1998).

The evidence for perceptual and attentional biases in individuals with health anxiety is not completely consistent, however. Barsky, Brener, Coeytaux, and Cleary (1995), for example, found that medical outpatients with hypochondriasis were not more accurately aware of normal cardiac activity than were their nonhypochondriacal subjects. Lecci and Cohen (2002) argue that the inconsistency in the findings on perceptual abnormalities is related to differences in how hypochondriasis is assessed, as well as to the circumstances in which the assessment of perceptual differences is conducted. Their study suggested that individuals with hypochondriacal tendencies display perceptual biases only when illness concern is activated. Lecci and Cohen manipulated illness concern by giving participants a fake medical exam and telling them that their blood pressure was dangerously high. Under these conditions, individuals with high scores on a measure of somatosensory amplification showed an increased focus on task-irrelevant, illness-related stimuli during the perceptual assessment. Thus, perceptual bias and increased attention to health information may occur only when an individual is in a state of increased health anxiety.

## Cognitive Factors

Interpretation of bodily sensations as indicative of serious disease, a central component of the cognitive-behavioral model, appears to be important in explaining some of the findings regarding perceptual and attentional

biases. Kellner, Abbott, Winslow, and Pathak (1987) reported that patients with hypochondriasis differed from anxious and depressed psychiatric patients in their health-related cognitions. They endorsed greater worries about disease, concern about pain, death anxiety, awareness of bodily sensations related to hearing or reading about a disease, and difficulty distracting themselves when they experience bodily symptoms. Patients with hypochondriasis also reported less confidence in their physician's diagnoses and quickly developed illness worries again after reassurance. Health services utilization was higher for those adults with hypochondriasis.

Several studies have examined the interplay between hypochondriasis and interpretation of bodily symptoms. Hitchcock and Mathews (1992) and Marcus (1999) demonstrated that, in nonclinical samples, individuals with higher levels of hypochondriacal concerns were more likely to interpret bodily symptoms as indicative of disease than were individuals with low levels of hypochondriasis. This pattern has also been reported with general medical practice patients (MacLeod, Haynes, & Sensky, 1998). Barsky, Coeytaux, Sarnie, and Cleary (1993) described similar findings with patients with a clinical diagnosis of hypochondriasis. They also found that hypochondriacal patients were more likely to consider common and ambiguous bodily symptoms to be pathological and indicative of sickness, as compared to a sample of nonhypochondriacal individuals. Thus, individuals with hypochondriasis believe that they have to be symptom-free to be healthy. Marcus and Church (2003) found that the tendency to overestimate the likelihood of disease could not be attributed to high levels of depression or general anxiety, but was predicted only by the level of hypochondriasis. Barsky, Ahern, et al. (2001) note that individuals with hypochondriasis do not see themselves as generally at high risk for injury or disaster. When compared to nonhypochondriacal individuals, they reported no greater estimate of risk for being in an accident or being the victim of a crime. Their overestimation of risk was limited to the likelihood of developing a serious disease.

We are aware of only one study that examines similarities and differences in cognitions among individuals with somatization problems and those with hypochondriasis (Rief et al., 1998). These authors found that both groups engage in catastrophic misinterpretation of bodily symptoms, believe that one must be symptom-free to be in good health, and report increased awareness of mild autonomic bodily sensations. Individuals with somatization problems without hypochondriasis describe beliefs about being weak and unable to tolerate physical effort. Intolerance of bodily complaints, meaning that the individual is quick to take medication or seek medical attention for a symptom, is more characteristic of individuals with hypochondriasis.

### Safety Behaviors

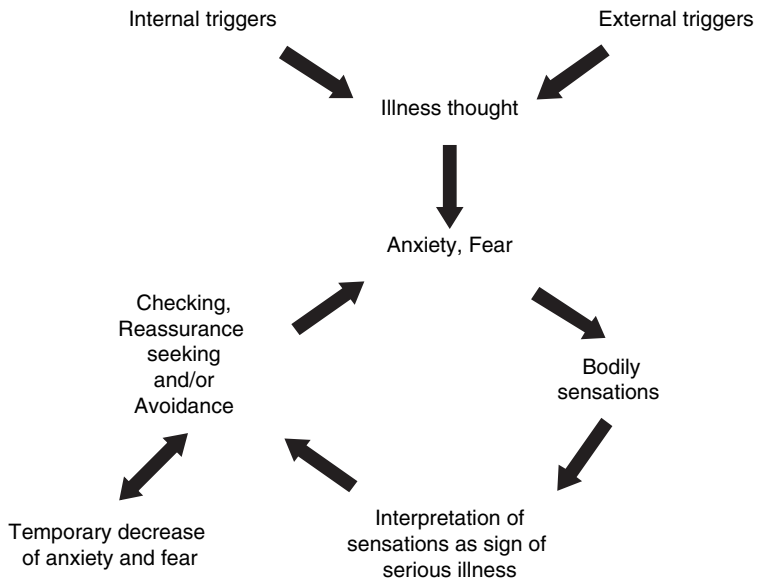
The cognitive-behavioral model suggests that safety behaviors such as reassurance seeking, bodily checking, reliance on safety signals, and avoidance behaviors are significant in maintaining health anxiety. There is limited research, however, investigating the effects of these behaviors in this population. An early study by Salkovskis and Warwick (1986) found that reassurance from medical professionals produced an immediate but temporary decrease in anxiety, followed by increased anxiety and reassurance-seeking behaviors. The high rate of health service utilization among individuals with health anxiety also supports the view that reassurance seeking is a central feature of this problem (see Chapter 1).

As with other conditions where anxiety is prominent, a common feature of hypochondriasis is the avoidance of situations and thoughts related to illness and death. Many individuals find themselves avoiding activities such as visiting friends who are ill, reading stories or watching movies about illness or death, reading the obituaries in the newspaper, and attending funerals (Warwick & Marks, 1988). While the typical presentation of hypochondriasis involves excessive use of the health care system, some individuals with health anxiety may avoid the use of appropriate health care services because of anxiety (Noyes et al., 2000). Much more research is needed to evaluate the impact of checking the body for symptoms, obtaining reassurance about health, and avoidance behaviors in the development and maintenance of health anxiety.

## COMPONENTS OF THE COGNITIVE-BEHAVIORAL MODEL FOR HEALTH ANXIETY

We use a model of health anxiety similar to that described by the Oxford group, albeit with greater emphasis on the behavioral factors. Health anxiety typically develops in the context of a biological predisposition to anxiety, illness or death-related experiences, and/or stressful life events. This model illustrates the factors involved in episodes of health anxiety (see Handout 3.1). Clients are generally receptive to a formulation of health anxiety that suggests that there are common triggers for worries about health. These triggers may include internal sensations such as bodily symptoms or changes in physiological function that are interpreted as signs of serious disease. External triggers, such as reading or hearing about illness, may also provoke episodes of anxiety. Hypervigilance results in an increased awareness of bodily symptoms.

**Handout 3.1.** Health anxiety: Cognitive-behavioral model.



The individual may employ a variety of safety behaviors in an effort to reduce anxiety: checking the body for signs and symptoms of illness, seeking reassurance about health issues, and reliance on safety signals (e.g., carrying anxiolitic medication, staying near a hospital). Avoidance of illness and death-related situations may develop in an attempt to cope with anxiety. Over time, these strategies increase health anxiety. Each of these components of health anxiety is described in more detail below.

*Jim: What if I have a brain tumor?*

*Jim has been having painful headaches for the past few days. Every time the headache starts (it starts right behind the eyes) he worries about what is causing this pain. The first thought that comes to his mind is that it must be from a brain tumor, or perhaps from an aneurysm. He tries to tell himself that the headache is just from stress but this doesn't help much. Jim finds himself rubbing his temples and forehead to see if he feels any lumps. When he notices that there might be a bit of swelling around his right temple, his anxiety becomes very intense. He asks his wife about this and she tells him he is just fine. Jim wonders whether he should go to his doctor to check this out.*

*Jennifer: Do I have MS?*

*Jennifer was reading an article about the signs and symptoms of multiple sclerosis in a magazine last week. Yesterday she started noticing some sensations in her hands, which she described as tingling and shooting sensations that ran through her fingers and up her arms. Jennifer is certain that this is exactly like one of the MS symptoms described in the article. She worries about this and wonders if she has other symptoms of MS as well. Later that day, she notices some dark spots in her vision when she moves her eyes and she thinks maybe her vision is a bit blurred as well. She is certain that these symptoms are all part of early MS and this makes her feel very anxious and panicky. She decides to search the Internet for more information on MS.*

## Internal Triggers

For many individuals, health worries fluctuate over time. This may occur because the triggers for health anxiety are present only intermittently. Possibly the most common triggers for episodes of health anxiety are internal ones. Many individuals report that physical symptoms are critical in setting off a period of increased disease fear or disease conviction. New symptoms, such as a rash or pain, or chronic symptoms such as headaches, may trigger fears of serious disease. Some individuals find that any new symptom can cause health anxiety. This anxiety is alleviated

only when the symptom disappears or is adequately explained. Others report that only certain types of symptoms cause worry for them, such as those related to the abdominal area (perhaps because they have a family history of bowel cancer). Chronic symptoms, such as headaches or other pain problems, may be particularly challenging if people are not satisfied with the medical explanation they have received.

Health anxiety may also increase when a person has an illness. The physical symptoms accompanying a milder problem such as a flu or a muscle injury may trigger increased worrying. Individuals may question the diagnosis or worry that a more serious disease process is the true reason for their symptoms rather than the more benign diagnosis they have received. Women going through a pregnancy may find that the many unfamiliar physical symptoms can trigger worries about both the baby's and the mother's health. (See Chapter 13 for more discussion about pregnancy.)

### External Triggers

External triggers may include media stories about illness, being diagnosed with an illness, having a friend or relative diagnosed with a serious illness, and experiences with death. Any of these external triggers may set off a chain of worry, checking, avoidance, and disease conviction. This episode may last for weeks, days, or months. Triggers for health anxiety may be highly individualized and a trigger for one person may have no impact at all on the health anxiety of someone else.

Certain external triggers appear to cause difficulty for many individuals with health anxiety. For example, extensive media coverage of a disease outbreak can set off substantial health anxiety in a community. Reports describing serious diseases that present with common physical symptoms (e.g., fatigue, flu-like symptoms) that can affect anyone (not just vulnerable populations) and do not have straightforward cures tend to be particularly anxiety-evoking. We found, for example, that there was a surge in concern about flesh-eating disease, sudden acute respiratory syndrome (SARS), and West-Nile virus among our clients after news coverage of these diseases. Many individuals, even those who do not typically have difficulty with health anxiety, may have some increased anxiety during a disease outbreak or when a "new" disease or virus is identified. For most people, this increased anxiety is temporary and generally does not disrupt daily living. For some individuals, however, the increased anxiety may be more significant.

Media coverage of commonly misdiagnosed diseases may also trigger health anxiety. For example, stories about under-diagnosis of heart disease in women and how some symptoms related to heart disease may be incorrectly attributed to other, less serious, causes can

cause substantial distress for some women. Similarly, hearing a story from a friend about a misdiagnosis that resulted in dire consequences may produce heightened desire for reassurance from health care professionals.

Health anxiety often increases when the individual is faced with a medical procedure or when a loved one is dealing with a medical crisis. When people have a mild illness, such as a flu, they may worry about being susceptible to more serious diseases or they may find that their increased physical symptoms (e.g., muscle aches, nausea, fatigue) trigger increased fears. Having to undergo a medical procedure or test can cause worries about what will be discovered. Uncertainty about what bodily symptoms are to be expected after a procedure may also trigger increased fears. This issue is addressed in Chapter 15. When a loved one is diagnosed with a serious illness, it is common for family members to consider their own vulnerability to that same disease.

*For Jennifer, reading the article about MS is a clear trigger for her worries about this disease. Jim's fears do not seem related to external triggers. Internal triggers are prominent in both case examples.*

## Illness-Related Thoughts

The internal and external triggers described above may result in health-related thoughts or images. For example, a person experiencing painful headaches (like our friend Jim) might say to himself, "I have really been working too hard this week. I need to get some rest and I think I should cut back on my coffee so that I will feel better." Alternatively, the headaches might give rise to thoughts such as "I have heard that people with brain tumors usually start off with headaches that they dismiss as nothing serious. Then they end up dying terrible deaths! I should go to the doctor right away." Needless to say, Jim would feel much more relaxed and would cope more effectively with his headaches if he were able to take the former approach. Unfortunately, his thoughts veer off in the direction of brain cancer and a painful death. These frightening thoughts contribute to the anxiety cycle.

For some individuals, the thoughts may be very specific and relate to fears or conviction about a certain disease, such as: "I must have stomach cancer" or "I am sure that this pain means I have a tumor." For others, the thoughts may reflect a more general fear that they are seriously ill or that they will become ill in the future. Examples of such thoughts include: "My sister's breast cancer means that I will die from breast cancer for sure." "The doctor must have missed something: this redness on my arm can't be just eczema," and "The doctor is sending me for an MRI so there must

be something seriously wrong." Many health-related thoughts are based on misinterpretations of bodily symptoms, but it is important to note that some, such as the thought about breast cancer, do not involve the direct experience of bodily symptoms.

For many individuals with health anxiety, intolerance of uncertainty appears to be a central concern. Intolerance of uncertainty has been defined as "an excessive tendency to find uncertain situations stressful and upsetting, to believe that unexpected events are negative and should be avoided, and to think that being uncertain about the future is unfair" (Dugas et al. 2005, p. 58). This cognitive style has been investigated primarily in individuals with generalized anxiety disorder (Ladouceur et al., 1999), but it is likely also relevant for individuals with health anxiety. Worries for individuals with health anxiety and somatic focus often center on doubts about the future (e.g., whether their symptoms worsen) and great discomfort with not knowing with certainty the outcome of potential choices (e.g., seeing another doctor or having further medical investigations) and future events (e.g., whether they will develop cancer).

## Hypervigilance

When a person feels threatened (by illness or death in this case), the body reacts accordingly with physiological changes, including increased heart rate, accelerated breathing, sweating, and muscle tension. These changes would help prepare the body to cope with actual physical danger. Since there is no actual danger in this situation, the physiological reactions have a different effect. The increased arousal may result in increased vigilance. Vigilance has survival value: if an individual is very alert and is carefully scanning the environment, he or she is likely to detect a threat earlier and to take protective action. People with health anxiety may turn this increased vigilance inwards and become ever more aware of bodily symptoms. This increased focus in turn leads to increased health-related thoughts and images and higher levels of anxiety.

## Safety Behaviors

### Checking and Reassurance-Seeking

Hypervigilance may easily lead to repeated checking of aspects of health functioning. In an attempt to cope with the threats they perceive, many people with health anxiety check their bodies regularly to assess their physical health and seek reassurance from others about the state of their health.

Typical examples of checking behaviors include probing the body for lumps, monitoring moles, monitoring pulse rate or blood pressure, checking for weight loss, monitoring pain levels or unusual bodily sensations, and frequent breast self-examinations. Reassurance-seeking strategies may include asking a family member, friend, or health care provider about symptoms, and researching symptoms or diseases in medical textbooks or on the Internet. Some clients report immediate anxiety reduction as a result of checking or reassurance seeking. They may feel a brief reprieve when they find no evidence of disease (e.g., do not find a lump during breast self-examination). Generally, this anxiety reduction is short-lived. People worry that they did not check thoroughly enough and therefore missed something important, or they may worry that something new has developed since they last checked a particular symptom. The anxiety then rebounds and the person may be tempted to check again or obtain further reassurance, perhaps from a different source.

Interestingly, many clients describe no anxiety reduction or even an increase in anxiety related to checking and reassurance seeking. However, they may believe that checking serves as a preventative strategy: "If I don't check my moles today, then I will be even more worried about them tomorrow."

Attempts to obtain reassurance from health care professionals may also be problematic. At times, the physician will send the client for extensive (and excessive) medical testing in an effort to allay the client's fears. This can have iatrogenic effects: the client may find that being sent for further investigations sets off new worries: "If the doctor is sending me for a CT scan, then I must have a serious disease that is hard to detect. My doctor obviously thinks there is something to be concerned about."

Another problem with checking and reassurance-seeking behaviors is that clients may find something that confirms their fears. For example, if a woman engages in daily breast self-examinations, she is likely at some point to find a breast lump. This discovery will have two effects: it will produce much anxiety about having breast cancer, and it will reinforce the belief that repeated checking is essential in detecting signs of disease. Checking and reassurance-seeking behaviors thus likely play a role in increasing or at least maintaining health anxiety.

*Jim's checking behaviors include rubbing his forehead and his temples to see if he can detect any lumps. His body checking results in an initial decrease in his anxiety but he then experiences panicky feelings when he finds swelling around his temple. Jim seeks reassurance from his wife and considers going to the doctor to get further reassurance about his symptoms. Jim does not find his wife's calm words very helpful. He fears that she no longer takes his concerns seriously and that she automatically dismisses any health fears he shares with her.*

*Jennifer relies on the Internet and medical articles for information and reassurance about her MS fears. She finds this to be quite a frightening strategy because every article she reads about MS seems to include descriptions of at least one symptom she has experienced. She is also frustrated because some of the articles and Web sites have conflicting information, so she is no longer sure what information to trust.*

### Safety Signals

People with health anxiety may develop reliance on safety signals such as always staying within a certain distance of a hospital or physician's office, carrying a cell phone in case of medical emergency, having food or juice in a purse or bag in case of episodes of dizziness, and always carrying certain medications even though they are rarely used. Having these safety signals nearby may result in temporary reduction in anxiety for some individuals. However, reliance on these safety signals may result in decreased confidence in ability to cope with challenging situations. Clients may become very anxious if they realize that they have forgotten their cell phone or water bottle and may feel that they are putting their health at risk if they get too far away from a hospital.

### Avoidance of Death and Illness-Related Situations

A common aspect of health anxiety is the avoidance of situations related to illness and death. Many individuals avoid activities like visiting friends who are ill, reading stories or watching movies about illness or death, reading the obituaries in the newspaper, and attending funerals. They may avoid thoughts about death, not have a will, and not inform family members about their funeral wishes. While individuals with health anxiety typically make excessive use of the health care system and engage in substantial checking of the body, some may avoid routine physician visits and recommended assessments. The reduction in anxiety maintains the avoidance behavior but creates several problems. Continual avoidance of illness and death-related situations erodes self-confidence and diminishes ability to cope with such situations. Many individuals find that avoidance spreads, with more and more situations causing discomfort and resulting in avoidance behaviors. Another difficulty with using avoidance as a coping strategy is that it is impossible to completely avoid reminders of illness and death. We all experience illnesses, both personal illnesses and illness in loved ones. Individuals may find that even mild conditions such as a cold or flu trigger high levels of anxiety. Experiences with death are also unavoidable. We will all lose friends and family members to death many times over the course of our own lives and we will ultimately

die ourselves. It is, impossible to read the newspaper or watch television without seeing some stories related to health or death. Similarly, it is very difficult to spend time with others without hearing anecdotes related to illness and death.

*Jim began finding it very difficult to read books or watch TV shows where a character had brain cancer. As time went on, he found it more and more difficult to hear stories related to all types of tumors and cancers. He would ask his wife to turn off the TV whenever health-related news stories came on or if cancer storylines unexpectedly arose on other programs. His wife was initially understanding but began to find it annoying when Jim's anxiety meant that she had to hide in the basement to watch her favorite show after a main character was diagnosed with breast cancer.*

## IMPLICATIONS FOR TREATMENT

An important feature of the cognitive-behavioral model of health anxiety is that it provides clear direction for treatment. Helping clients understand how their health anxiety may have developed and how it is maintained provides an excellent basis for discussion of how the individual can intervene to disrupt the health anxiety cycle. The model thus leads smoothly to the development of a cognitive-behavioral intervention to address the individual's specific concerns. Chapters 4 and 6 of this volume outline various cognitive-behavioral approaches for health anxiety and more detailed descriptions of the principal treatment components are provided in Chapters 7–11.

CHAPTER 4

# TREATMENT: WHAT ARE THE CHOICES?

Historically, somatoform disorders were viewed as resistant to treatment. This perspective has changed over the last 20 years, however, as several treatment approaches have been found to be effective in reducing hypochondriasis and other problems with health anxiety and somatization. Various forms of cognitive-behavioral therapy (CBT) have been evaluated and found effective. Both individual and group CBT treatments appear to be viable options. Preliminary findings suggest that bibliotherapy may also be effective. Research evaluating pharmacological treatments is presently in its early stages, but some medications appear promising.

## COGNITIVE-BEHAVIORAL THERAPY

### CBT FOR HYPOCHONDRIASIS

The number of studies reported in this area, particularly the number of controlled trials, has been modest, although results are promising. Studies have targeted various populations and the specific cognitive-behavioral procedures used have differed from study to study. The treatment strategies have been drawn from previous work on anxiety disorders, particularly panic disorder, obsessive-compulsive disorder, and generalized anxiety disorder.

## Small-N Design Evaluations of CBT for Hypochondriasis

Numerous uncontrolled case studies describe treatments for hypochondriacal concerns. The three studies reported here, however, all use small-N experimental designs and have made a significant contribution to the treatment literature in this area.

The pioneers in the area of CBT and hypochondriasis have been the group at Oxford University (including Salkovskis, Warwick, Clark, and others). Salkovskis and Warwick published one of their first papers on health anxiety and hypochondriasis in 1986. They describe two single-case experiments investigating the effects of reassurance seeking and response prevention (targeting reassurance seeking and checking) in DSM-III hypochondriasis. The results of these studies suggest that reassurance from medical professionals produced an immediate decrease in self-reported anxiety, but this was followed by a subsequent increase in anxiety and reassurance seeking. Response prevention, including withholding of reassurance and instructions to reduce checking of bodily symptoms, resulted in a clear decrease in visual analogue scale self-ratings of health anxiety, illness beliefs, and reassurance seeking. The authors note that the response-prevention strategy had the effect of exposing the patients to the feared stimuli and thus resulted in anxiety reduction.

Visser and Bouman (1992) describe an elegant study using a crossover design to compare cognitive and behavioral treatments for DSM-III-R hypochondriasis. Three clients started treatment with five sessions of cognitive therapy followed by five sessions of in vivo exposure with response prevention. The other three clients received the treatments in reverse order. The cognitive intervention involved identification of catastrophic health-related cognitions, socratic discussion of these thoughts, formulation of alternative explanations for the physical symptoms, and development of noncatastrophic cognitions. The behavioral intervention involved identification of avoidance of health related situations and construction of an exposure hierarchy. Exposure was accompanied by response prevention targeting bodily checking and reassurance-seeking behaviors. Five patients completed treatment (the sixth patient dropped out after the second session because he felt he was cured). Of the five who completed treatment, four made significant gains, and one showed no improvement during either treatment. Patients receiving the behavioral intervention first appeared to do somewhat better than those receiving the cognitive intervention first. Both treatments, however, appeared to be helpful in reducing hypochondriacal symptoms and gains were maintained at three-month follow-up.

Papageorgiou and Wells (1998) present three case studies using an A-B-A research design evaluating the effectiveness of attentional training. The three participants were aged 65 and older, and all met DSM-IV criteria for hypochondriasis. The attention training procedure (ATT) is described in detail by Wells (1990) in his paper on panic disorder and is summarized in the Papageorgiou and Wells paper (1998) as follows:

> ATT consists of regular practice of external auditory attention exercise (i.e., selective attention, attention switching, and divided attention) aimed at diminishing self-focus and increasing the meta-cognitive control of attention. ATT is not intended as a distraction from anxious thoughts and symptoms, but it is intended to facilitate the "switching off" of perseverative self-focused processing (p. 194).

All three individuals showed substantial reductions in health worry, illness belief, reassurance seeking, bodily checking, avoidance, body-focused attention, and ratings of anxiety and depression. Treatment gains were maintained at six-month follow-up.

### Controlled Trials

The Oxford group expanded its work on hypochondriasis with two controlled trials of CBT. The treatment procedures are summarized in Warwick and Marks (1988), Warwick, Clark, Cobb, and Salkovskis (1996), Clark et al. (1998), and more recently in Warwick and Salkovskis (2001). This group has incorporated a broad range of cognitive-behavioral procedures commonly used to treat anxiety disorders, including education about the problem (participants were given individualized written formulations of their problem from a cognitive-behavioral framework); education about the meaning of physical symptoms, medical interventions, and medical opinions; induction of symptoms through bodily focussing; use of diaries to record negative thoughts and rational responses; behavioral experiments to clarify the development of symptoms; response prevention for bodily checking and reassurance seeking; participation in treatment of significant others who provide reassurance; and exposure to previously avoided illness-related situations. The results of their initial randomized trial (Warwick et al., 1996) suggested that individual CBT (up to 16 sessions over a four-month period) was superior to a waiting-list control condition and that treatment gains were maintained at a three-month follow-up. The CBT resulted in significantly reduced ratings of anxiety and health anxiety, depression, disease conviction, need for reassurance, time spent worrying about health, and checking behaviors. Only patient ratings of avoidance did not differ

significantly between the two groups. The sample size in this study was modest with 32 participants.

In a second randomized trial (48 participants), Clark et al. (1998) compared two active treatments and a waiting-list condition. The CBT was essentially the same as in Warwick et al. (1996). The second active treatment was behavioral stress management and incorporated a variety of procedures, including identifying stressors, listing the physical symptoms and psychological changes that may result from stress, and Öst's (1987) applied relaxation program. When applicable, additional techniques were also taught, including problem-solving, assertiveness training, and time-management. If illness worries persisted, scheduled worry time was added. It is important to note that the applied relaxation incorporated exposure to feared illness-related situations: "Training [in the applied relaxation procedure] extended over 10 sessions and included, in the application phase, instructing patients to expose themselves repeatedly to any situations or activities they were avoiding because of anxiety, including, if relevant, situations which were avoided because they triggered health worries" (p. 219). It appears that two specific treatments for health anxiety were being compared in this trial rather than the behavioral stress management serving as a control condition for nonspecific treatment factors, as suggested by the authors. Both the CBT and behavioral stress management were found to be effective and superior to the waiting-list condition. The two treatments were equivalent at one-year follow-up.

Bouman and Visser (1998) compared two interventions using random assignment to either a behavioral or a cognitive treatment. The behavioral treatment involved response prevention and exposure to previously avoided situations or bodily sensations. The cognitive treatment did not involve behavioral experiments but, rather, emphasized Beck's approach to cognitive intervention (Beck & Emery, 1985). The treatments were similar to those used by Visser and Bouman (1992). Both treatments produced reductions in symptoms of hypochondriasis and somatization. Treatment gains were maintained at one-month follow-up. No differential treatment effects were found between the behavioral and cognitive approaches, although the sample size (total *N* of 17 patients) was modest and, consequently, the comparison between the procedures was limited in its statistical power.

This finding was replicated in a larger randomized trial (Visser & Bouman, 2001) that compared the behavioral and cognitive treatments and a waiting-list control condition. In this study, which had a total of 78 participants across the three conditions, both active treatments were equally effective. There was no improvement in the waiting-list condition.

Fava, Grandi, Rafanelli, Fabbri, and Cazzaro (2000) conducted a trial comparing explanatory therapy and a waiting-list control condition. The authors describe explanatory therapy as "providing accurate information, teaching the principles of selective perception (attention to one part of the body makes the patient more aware of sensations in that part of the body than in other parts), reassurance, clarification, and repetition" (p. 317). This approach is based on Kellner's (1979) work. Ten patients with DSM-IV hypochondriasis were randomized to each condition. Treatment consisted of eight, 30-min sessions spread over 16 weeks. Therapy resulted in significant improvement in health anxiety and decreased health care visits, as compared to the control condition. These gains were maintained at six-month follow-up.

Barsky and Ahern (2004) describe a randomized trial comparing individual CBT to a "usual medical care" control condition. The CBT sample comprised 102 individuals, and 85 were assigned to the control condition. Half the total sample met DSM-IV criteria for hypochondriasis and the other half had subsyndromal hypochondriasis. The CBT involved six, standardized, individual, weekly sessions of 90 min duration. The treatment addressed the five factors the authors thought were related to the patients' amplification of somatic symptoms and misattribution of these symptoms to serious disease (a) attention and hypervigilance, (b) beliefs about causes of symptoms, (c) circumstances and context of symptoms, (d) illness and sick role behaviors, and (e) mood. Each CBT session involved educational information, demonstrations, and discussion focussed on one of these factors. In the CBT condition, a standardized consultation letter with recommendations for medical management was sent to the patient's primary care physician. This protocol emphasizes cognitive interventions and does not incorporate exposure to illness fears. The CBT intervention was significantly superior to the control condition in reducing hypochondriacal concerns and behaviors as assessed 6 months after treatment. These gains were maintained at 12-month follow-up.

### Evaluations of Group CBT for Hypochondriasis

A few studies have been published that describe group CBT for health anxiety. Stern and Fernandez (1991) described a small open trial of group treatment for hypochondriasis. The six participants met full diagnostic criteria for hypochondriasis. The cognitive educational treatment consisted of nine, 90-min group sessions. Topics covered included (a) information about the problem; (b) attentional focus as a factor increasing symptoms; (c) relaxation; (d) self-monitoring of symptoms and the dysfunctional thoughts that accompanied them; (e) discussion of the effect of

reassurance seeking; (f) instructions to discontinue reassurance seeking, including medical investigations; and (g) the role of depression and stress in the problem. Homework assignments were given to implement these procedures in everyday life. The authors mention that one group member who had a compulsion to repeatedly check her temperature was encouraged to stop this practice (response prevention). Self-reported physician visits and time thinking about illness (as measured by a visual analogue rating scale) decreased at post-treatment and these gains were maintained at a six-month follow-up.

Avia et al. (1996) compared a group program (two groups with nine members in all) to a six-week waiting-list control condition (eight individuals). Approximately half the participants met the full criteria for hypochondriasis and the remaining participants displayed subthreshold levels. The cognitive educational intervention was based on the model of Barsky, Geringer, and Wool (1988). There were six sessions (described in Avia et al., 1997), which covered five broad topic areas (a) inadequate and selective attention to bodily sensations, (b) muscle tension and bad breathing habits, (c) environmental factors that effect emotion, (d) stress and dysphoric mood and their effect on symptoms, and (e) the explanations given to somatic signals. Reduction of reassurance seeking was not emphasized, although there was a suggestion that participants try a period of refusing to talk about bodily symptoms as a behavioral experiment. There was significantly a greater reduction in illness concern and somatic symptoms for the CBT participants than for the waiting-list controls.

Bouman (2002) conducted an open trial investigating the utility of a group cognitive educational approach to hypochondriasis with a self-referred community sample. Participants, who met DSM-IV criteria for hypochondriasis, received seven, 2-hour group sessions. The first five sessions covered the following themes (a) a description of a CBT model for hypochondriasis; (b) discussion of the role of misinterpretations of bodily symptoms and ways to challenge these; (c) the effects of selective attention; (d) the impact of safety behaviors, avoidance, reassurance seeking, and bodily checking; and (e) the impact of stress on body symptoms. In the sixth session, participants were asked to use this information to create their personal CBT model of hypochondriasis and to develop possible interventions. The seventh session was a booster session and was conducted after a four-week break. Bouman notes that the homework assignments were brief and optional, and included challenging hypochondriacal thoughts, recording avoidance behaviors, and monitoring daily hassles. Results indicated that the 21 of 27 participants who completed the program showed significant reduction in symptoms of hypochondriasis and depression, and this improvement was maintained at six-month follow-up.

## CBT FOR SOMATIZATION

The application of CBT to somatization was first described by Salkovskis (1989) and then by Sharpe, Peveler, and Mayou (1992). There are several excellent reviews of the expanding literature in the area of somatization and somatoform disorders, including those provided by Kroenke and Swindle (2000), Nezu et al. (2001), and Looper and Kirmayer (2002). This research will not be reviewed in detail here. We will discuss the literature examining the effectiveness of CBT for noncardiac chest pain, which can be categorized as DSM-IV Undifferentiated Somatoform Disorder, as an example of how CBT can be applied to somatic concerns.

Noncardiac chest pain refers to presentations of chest pain without accompanying serious heart disease and with normal cardiac findings. Klimes, Mayou, Pearce, Coles, and Fagg (1990) described a controlled trial at Oxford University where 31 patients with noncardiac chest pain were randomized to either CBT or an assessment-only control group. The CBT involved 4–11 sessions providing strategies for coping with the pain symptoms and cognitive restructuring. Session topics included (a) progressive muscle relaxation, (b) information about the effects of overbreathing (illustrated with an in-session demonstration) and the use of slow-paced breathing, (c) distraction from symptoms and worrying, (d) monitoring the effects of these three strategies on chest pain, (e) exposure to exertion or exercise, (f) response prevention for body checking and reassurance-seeking behaviors, (g) pacing activities, (h) cognitive challenge about illness fears, and (i) problem-solving for social problems. All patients received the first four components of this treatment and those with continued difficulty received further sessions with some or all of the remaining techniques. The authors report that the CBT group achieved significant reduction in chest pain, interference with daily life, and general distress. The assessment-only group reported no changes after 3 months. This control group was subsequently offered the same treatment and showed similar improvement. Treatment gains were maintained at six-month follow-up. A second study by this group provides further examination of this CBT approach (Mayou et al., 1997). CBT was compared to an assessment-only control condition (total $N = 37$). Interestingly, they found that there were significant differences between the two conditions on all outcome measures at the three-month assessment point, but this difference narrowed at 6 months. At this assessment, the untreated controls showed gradual improvement in some areas, including frequency of chest pain, distress about pain, and the number of pain-free days. The CBT group, however, reported less interference

in daily activities and less severe chest pain, and were closer to their premorbid functioning than the control group.

Van Peski-Oosterbaan et al. (1999) reported the outcome of a larger controlled trial with 72 patients with nonischemic chest pain. The CBT was compared to medical care as usual. The CBT involved 4–12 sessions over a maximum of 6 months. The treatment was similar to that described by the Oxford group and included relaxation strategies, cognitive restructuring, behavioral experiments, and relapse prevention. The CBT was more effective in reducing the frequency and intensity of chest pain with 48% of the CBT group being pain-free at one-year follow-up as compared to 13% of the control group. As in the Mayou et al. (1997) study, the control group made modest improvements over time but did not improve as much as the CBT group.

There is one controlled trial ($N = 60$) examining group CBT for noncardiac chest pain (Potts, Lewin, Fox, & Johnstone, 1999). The CBT groups involved six sessions over eight weeks and incorporated education, progressive muscle relaxation, breathing training, graded exposure to previously avoided activities and exercise, and cognitive restructuring. The control subjects were offered the same treatment after a two-month waiting period. Self-report measures were supplemented with exercise electrocardiography (to assess exercise tolerance) and capnography (to assess hyperventilation). CBT resulted in greater reduction in episodes of chest pain, anxiety, depression, and disability, and increased exercise tolerance. These gains were maintained at six-month follow-up.

The literature examining the role of CBT for noncardiac chest pain is limited but the controlled trials described above provide evidence of the utility of this approach for reducing chest pain and related disability. Follow up assessments of up to one year suggest good maintenance of gains. Similar positive results have been found with other forms of somatization (see Kroenke & Swindle, 2000; Looper & Kirmayer, 2002; Nezu et al., 2001).

## Self-Administered CBT and Health Anxiety

Self-help approaches include bibliotherapy, treatments involving limited therapist contact, and computerized treatment systems. Bibliotherapy has been shown to be effective in numerous areas, including anxiety disorders (Bower, Richards, & Lovell, 2001; Kupshik & Fisher, 1999; Wright, Clum, Roodman, & Febbraro, 2000), depression (Floyd, Scogin, McKendree-Smith, Floyd, & Rokke, 2004), insomnia (Mimeault & Morin, 1999), and eating disorders (Bailer et al., 2004; Durand & King, 2003). Minimal-contact CBT is a useful approach for anxiety and depression (Bower et al., 2001; Finch, Lambert, & Brown, 2000; Newman, Erickson, Przeworski, & Dzus,

2003; Richards et al., 2003). Computer-aided self-help treatment also has demonstrated potential with these disorders (Gega, Marks, & Mataix-Cols, 2004; Marks, Kenwright, McDonough, Whittaker, & Mataix-Cols, 2004; Marks et al., 2003).

Only one study we are aware of has examined the role of self-help treatment with health anxiety. Jones (2002) compared a four-week CBT bibliotherapy condition and a waiting-list control condition. The manual Understanding Health Anxiety: A Self-Help Guide for Sufferers and Their Families (Küchemann & Sanders, 1999) provides strategies to help patients stop bodily checking and reassurance seeking, minimize avoidance, stop behaving as if they were ill, and challenge their health worries. The 40 participants were identified by their family physicians as having health anxiety (no specific diagnostic criteria were noted). Half the participants were also diagnosed with a physical illness. Patients receiving bibliotherapy showed significant reduction in health anxiety and general anxiety while no change was reported for the control group. Clearly, further research exploring bibliotherapy and health anxiety is necessary, but the Jones study provides preliminary support for this cost-effective and easily disseminated approach. Other inexpensive self-administered treatments, including self-help support groups and minimal contact therapies, may also serve a useful role in addressing health anxiety.

## CBT AND HEALTH ANXIETY: FUTURE DIRECTIONS

Recent research investigating the effectiveness of CBT for health anxiety has demonstrated considerable success in reducing worries about health, time spent checking bodily symptoms and obtaining reassurance from others, and avoidance of health-related situations. Some studies have found that health services utilization decreases after CBT. This treatment appears to be useful with a range of problems involving health anxiety, including somatization, hypochondriasis, and noncardiac chest pain. The treatment procedures have varied considerably from study to study, and various active treatments, including CBT, behavior therapy, cognitive therapy, and behavioral stress management, all appear to have beneficial effects.

More research is needed to determine how to maximize treatment effectiveness for health anxiety problems and to identify which treatment components are critical for success. Some researchers (e.g., Visser & Bouman, 2001) have tried to tease apart the relative contributions of the behavioral and cognitive components of health anxiety treatments but the results have been inconclusive. Findings from the more extensive literature with the anxiety disorders may be useful. Deacon and Abramowitz (2004) summarize the findings of meta-analyses across the

various anxiety disorders and conclude that combined cognitive and behavioral treatments are clearly effective, as are more purely behavioral treatments (i.e., exposure-based approaches). These authors believe there is insufficient data for reliable conclusions about the effectiveness of purely cognitive treatments.

Interventions for health anxiety that focus on exposure may be particularly important for several reasons (Furer & Walker, 2005). First, exposure approaches are straightforward and relatively easy to teach to clients and clinicians. They work well even with children and with adults with limited education or verbal skills. Second, extinction, which is facilitated by exposure, has been found to be an important part of the anxiety reduction process. Third, the basic research on processes involved in fear, fear reduction, and the return of fear suggests that exposure to a wide range of the cues and contexts where anxiety has been experienced may have some advantage in reducing relapse rates over the long run (Bouton, 2002). At this point, this is a theoretical advantage only because over the follow-up periods in recent clinical trials (6–12 months in most cases), interventions emphasizing cognitive components of CBT appear to stand up as well as those that emphasize behavioral components. It remains to be seen which approaches will be found most effective in long-term studies. Many individuals receiving current treatments for hypochondriasis show considerable improvement but continue to experience some symptoms. More attention to the influence of various components of treatment and closer matching of treatment to individual problems may allow us to develop even more effective treatments.

One difficulty with the research is the limited detail provided about the techniques used. It is often difficult to determine, for example, whether treatments described as cognitive in orientation also incorporated features more typical of behavioral treatments, such as exposure to feared stimuli. Precise descriptions of treatment procedures would simplify comparisons across studies. Assessment strategies also present some challenges for comparison of treatment outcome studies. Many researchers are now reporting outcome using well-validated and broadly available measures (see Chapter 5).

## PHARMACOTHERAPY

There are limited data evaluating pharmacological treatments for the somatoform disorders. A number of case reports describe positive results with hypochondriasis with and without delusional psychotic features (see

Chapter 12 in this volume; see also Enns, Kjernisted, & Lander, 2001). To date there have been only three reports of open-label trials of treatment of hypochondriasis with generally positive effects (Fallon et al., 1993; Kjernisted, Enns, & Lander, 2002; Wesner & Noyes, 1991). Open trial evaluations of antidepressants with other somatoform disorders have also been reported with generally favorable results (Menza et al., 2001; Noyes et al., 1998). Only one randomized placebo-controlled trial for hypochondriasis has been reported with 8 of 12 patients who received fluoxetine being classed as responders as compared to 4 of 8 on placebo. The sample size in this study was small and statistical comparison did not reveal a statistically significant treatment effect (Fallon et al., 1996).

In spite of the limited research on pharmacological treatment of these disorders, this is the most widely available treatment and probably the most frequently used with hypochondriasis and other somatoform disorders (Escobar, 1996). Enns et al. (2001) point out that many of these individuals have comorbid anxiety or depressive disorders, and pharmacological treatments (including selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors) have been shown to be effective for those conditions.

## COMBINED TREATMENT

Combining psychological and pharmacological treatments is sometimes suggested as a strategy to enhance treatment effectiveness. However, research on combined treatments with anxiety disorders often suggests that this produces no greater effect than either treatment provided alone (Abramowitz, 1997; Barlow, Gorman, Shear, & Woods, 2000; Foa, Franklin, & Moser, 2002; Kobak, Greist, Jefferson, Katzelnick, & Henk, 1998; Westra & Stewart, 1998), and may, in fact, simply combine the disadvantages of each treatment. In our clinic, we do not routinely combine treatments, but individuals who have experienced some benefit but not complete remission with one treatment approach (e.g., antidepressant medication) will often continue with this while the second treatment (e.g., CBT) is added.

Clearly, it is desirable for the specialist in CBT to have a good working knowledge of common pharmacological treatments for health anxiety and vice versa. This is necessary to provide information about treatment options and to be able to provide good support and information to individuals who are concurrently receiving pharmacological treatment. The clinician can encourage appropriate compliance with medication and assist the client in trouble-shooting any problems that come up. Many clients experience waxing and waning in symptoms because of

inconsistency in taking medications; others misinterpret the significance of medication side effects (such as sexual difficulties) that are common with many antidepressants. Some clients benefit from additional support and education if they decide to taper or gradually discontinue medication treatment (in consultation with the prescribing physician) after a significant period of low symptom activity (Whittal, Otto, & Hong, 2001).

## META-ANALYSIS OF HEALTH ANXIETY TREATMENTS

Taylor and Asmundson (2004) provide a preliminary meta-analysis comparing different treatments for health anxiety across 15 studies. They summarize controlled and uncontrolled studies of psychological and pharmacological treatment. The authors acknowledge that the sample sizes and number of trials for each type of treatment were small and recommend interpreting the results with caution. Effect sizes were calculated for each treatment condition based on complete analyses from pre- to post-treatment for self-report measures of health anxiety, general anxiety, and depression. Taylor and Asmundson report that all the active treatments had greater effect sizes than waiting-list control conditions, with CBT and fluoxetine having the largest effect sizes for hypochondriasis (2.05 and 1.92, respectively, compared to 0.29 for wait-list control conditions). Dropouts were lowest for the control conditions, higher for the psychosocial treatments, and highest for the drug trials. Taylor and Asmunsdon conclude that: "When treatment acceptability, and strength, breadth, and durability of effects are taken into consideration, CBT appears to be the treatment of choice for full hypochondriasis" (p. 82). They suggest that for mild, uncomplicated health anxiety, a psychoeducational approach may be adequate, but when health anxiety is accompanied by depression, CBT may be more appropriate.

## MAKING TREATMENT CHOICES

In considering treatment with a client, both CBT and pharmacotherapy should be discussed. Many individuals have definite opinions concerning treatment when they first seek help. Exploring the client's preferences about treatment first is advisable, although most clients also value the clinician's input. We try to provide a balanced description of these two primary types of treatment, outlining the advantages and disadvantages of each, with an emphasis on the positive aspects of each treatment. This information enables the client to provide truly informed consent for

treatment. We generally suggest that the client is likely to see improvement in their health anxiety with either treatment approach, provided that he or she participates fully in the treatment. If the client prefers a treatment not provided by the clinician, an appropriate referral is made.

## Indications for Pharmacotherapy

There is no research literature to guide choice of psychological versus pharmacological treatments for a given individual or for a specific presentation of health anxiety. It may, however, be appropriate to recommend pharmacological treatment when (a) the client is interested in this treatment modality, (b) the client is not interested in psychological approaches or does not wish to invest time and energy into psychological treatment, and (c) the client has not tolerated CBT or found that it was not helpful. Individuals in severe distress, with depression that impairs ability to participate in CBT, or clients with limited insight may be more suitable for pharmacotherapy.

## Acceptability of Psychological Treatments for Individuals with Health Anxiety

When we began our work in this area, we had some concern that psychological treatments would not be well-accepted by individuals with health anxiety. To address this question, our group surveyed 23 individuals with a DSM-IV diagnosis of hypochondriasis seeking help with problems with worries about illness (Walker, Vincent, Furer, Cox, & Kjernisted, 1999). The survey included balanced descriptions of a medication treatment and CBT. Respondents predicted that CBT would be more effective in both the short and long term, and rated CBT as the more acceptable treatment overall. CBT was indicated as the first choice by 74% of respondents, medication by 4%, and 22% did not have a preference.

Similarly, Speckens, van Hemert, Bolk, Hawton, and Rooijmans (1995) found psychological treatments to be very acceptable to most patients presenting with medically unexplained physical symptoms in a general medical outpatient clinic with 81% indicating willingness to participate in CBT. Those who chose not to pursue this treatment reported fewer and less disabling physical symptoms. The authors speculate that, given their lesser symptomatology, these individuals may have less need for treatment.

These findings are consistent with our clinical impressions. We have found that individuals are very interested in learning psychological approaches to manage their anxiety. It is important that clinicians take a

neutral stance as to whether the individual has or may get a serious physical disease. Psychological treatments formulated to convince clients that they are not physically ill may be less acceptable.

## Individual Versus Group CBT

For clients who choose CBT, there is the question of whether to provide individual or group therapy. A substantial patient flow is required in order to have sufficient numbers of clients who are suitable for group therapy and who are ready to begin treatment at the same time.

If a program is able to offer both individual and group CBT, it is useful to consider the advantages of each. Group treatment allows clients to meet others with similar concerns. Many clients find it a relief to finally be able to discuss their fears and concerns with others who genuinely understand their experience and who are sympathetic to their worries. A group member at our center reported: "I always felt crazy worrying so much about having an allergic reaction to something and dying, but here I see other really normal people with productive lives who worry about the same things as I do. We may have these fears and worries but that does not make us crazy." Some clients, however, prefer the privacy of individual treatment. Others may choose individual therapy because they fear they will acquire new worries and symptoms from other group members. We have rarely found this to be the case, but if it does occur, it can provide an excellent opportunity for immediate learning in a treatment context. Individual treatment can be more closely tailored to the presenting concerns and may thus be briefer and may be adjusted for unique problems. Since our CBT program requires substantial reading and writing, we also provide individual treatment for clients with limited literacy.

The suitability of an individual for a group program should also be considered. If a client's presence is likely to seriously distract other group members from the goals of treatment or to interfere with their progress, individual therapy may be a better option. Clients with unstable living situations or personal crises (e.g., current suicidal intent), as well as individuals who would tend to monopolize the group therapy sessions, are generally directed towards individual treatment. Clients with high disease conviction, and who are not open to the idea that health anxiety may be an important factor in their condition, may not fit well in a group. Similarly, individuals who express a great deal of frustration and anger directed toward health care providers, and who are therefore unable to focus on the content of the CBT program, may cause distraction for other group members. These problems arise infrequently in our practice. In

general, we encourage participation in group CBT because of the lower cost of this type of treatment and because the group program has been well received by clients.

## CONCLUSION

Treatment of health anxiety has progressed enormously over the last 20 years. This is an evolving area of research and we are now in the fortunate position of being able to recommend treatment options that have significant empirical support.

CHAPTER 5

# ASSESSMENT

Clinician evaluation and self-report instruments are central to a comprehensive assessment of health anxiety. The goals of assessment include identifying potential diagnoses and comorbid problems and obtaining detailed information about the presenting concerns. This information is then integrated to provide a case formulation that will guide treatment. The assessment should also provide baseline levels of key symptoms (e.g., anxiety, avoidance, safety behaviors, worries, somatic symptoms) in order to assess therapy effectiveness.

## THE ASSESSMENT INTERVIEW

The assessment interview is an important opportunity to establish rapport and communicate understanding and empathy for the client's situation. This interview may be the client's first opportunity to meet with a professional who has a psychological perspective on health anxiety. It is essential to establish clearly that the clinician believes that the reported somatic symptoms are real and are *not* a product of the client's imagination. Acknowledging the distress experienced as a result of the somatic symptoms and anxiety is essential.

Before initiating a discussion of health anxiety and somatic concerns, it is important to review the status of the client's physical health and history of health problems, including obtaining information about specialists

seen, medical tests and diagnostic assessments, and any treatments received. Communication with the client's physician is helpful although most clients provide reasonably reliable medical histories. Listening carefully to the client's medical experiences will also provide the clinician with valuable information concerning beliefs about health and illness, as well as both adaptive and maladaptive coping strategies.

A thorough review of the client's history of anxiety regarding health issues is also critical in identifying predisposing, precipitating, and perpetuating factors. Many individuals report an extensive history of difficult life experiences of illness and death, often dating from childhood. Unresolved grief is also common. The onset or exacerbation of the disorder at a stressful time in the person's life is typical. Once the disorder becomes well established, perpetuating factors (such as the safety behaviors and avoidance described in Chapter 3) often make it difficult for the client to break out of the pattern of excessive worry about health and somatic concerns.

Once there is a thorough evaluation of health and symptoms it is important to consider the client's functioning in important aspects of life. How is the person functioning with respect to home life, work life, social life, and relationships? Have psychological difficulties had an impact on functioning in these areas? Are there other life stresses and problems that should be addressed? Are there areas of strength that will help in making progress in treatment? In case of formulation and treatment planning it is important to focus on the whole person and to focus on approaches that will improve functioning and quality of life beyond simple symptom removal.

*Maria is a 52-year-old woman living in a long-term relationship. She works full-time as an administrative assistant. Maria presented to our program in response to a local newspaper ad describing a research study evaluating psychological treatment for health anxiety. Maria grew up in a very traditional, religious European family. She reported that her parents were often in conflict. The main focus of their relationship was on her as the only child. Maria's grandmother had breast cancer when she was young but did not die from this illness. Since childhood (ages seven or eight), Maria had been very concerned about blood as a sign of serious illness: she remembers checking her stool, urine, throat, and nose for traces of blood. She had two experiences with young friends dying when she was a teenager: a girlfriend was killed and Maria stood by the open casket for a two-hour church service, and another good friend died of stomach cancer when Maria was 15. As a young adult, Maria lost three of her best friends. One friend had a heart attack, one died of AIDS, and one committed suicide. More recently, her mother died of bowel cancer when Maria was 49.*

*She had been her mother's sole caretaker for a number of years before her death. Her father had died of multiple health problems seven-years prior to this. She had also been involved with his care.*

## Structured Interviews

Structured interviews are the research standard in diagnosing somatoform and other DSM-IV disorders. The Structured Clinical Interview for DSM-IV Axis 1 Disorders (SCID-IV; First, Spitzer, Gibbon, & Williams, 1991) is a popular and comprehensive clinician measure. The Composite International Diagnostic Interview, which was developed for use by trained nonclinician interviewers (CIDI, World Health Organization, 1991), can be used with both ICD-10 and DSM-IV criteria. Both these interviews have a section addressing somatoform disorders. Williams et al. (1992) report that the test–retest reliability of the SCID for DSM-III-R (an earlier version of the same interview) is reasonable. Reliability of the SCID-IV is likely similar. Interrater reliability of the CIDI is good (Wittchen, 1994; Wittchen, Essau, Rief, & Fichter, 1993) and there is some evidence supporting the diagnostic validity of the somatoform disorders section (Wittchen et al., 1993).

An additional diagnostic interview that may be of interest is Barsky's Structured Diagnostic Interview for Hypochondriasis (SDIH; Barsky et al., 1992). This interview was designed to accompany the SCID and therefore only provides diagnostic information about hypochondriasis. Barsky et al. suggest that interrater reliability of the SDIH is good and there is some evidence in support of its concurrent validity (the instrument is compared with other established measures of hypochondriasis) and convergent validity (assessed by correlating the interview with measures of other constructs thought to be related to hypochondriasis).

An advantage of these structured interviews is that they produce reliable diagnoses that may enhance consistency and comparability across research studies. Further validation of these instruments is needed, however, and to date, no clear evidence supports the superiority of one instrument over the other. Stewart and Watt (2001) recommend choosing the interview based on the purpose of the assessment. At our center we use structured interviews in the context of research studies but not routine clinical practice.

*Maria was interviewed with the SCID prior to entering the treatment study and her concerns met DSM-IV criteria for hypochondriasis. She indicated that she worried all the time about her health with a particular fear of throat cancer. This worry had been intense for most of the last two years. In the past she had also had extended periods of worry about other diseases, including bowel cancer, heart*

*disease, and multiple sclerosis. Her current fears about throat cancer were triggered by various symptoms such as a sore throat, cough, difficulty swallowing, and the feeling of a lump in her throat. Maria's worries spoiled her enjoyment of life and she described her anxiety as paralyzing. She did not find reassurance from her family physician to be very beneficial. Maria also reported some symptoms of depression, including fatigue and difficulty concentrating. She reported past episodes of DSM-IV depressive disorder but her current symptoms did not meet full criteria for major depression.*

## Clinical Interviews

There may be some disadvantages to using structured diagnostic interviews. They may not be practical in a clinical setting and, furthermore, the somatoform disorder sections of the SCID and the CIDI are not extensive. Health anxiety concerns not meeting criteria for a somatoform or anxiety disorder may also be missed (or ignored) if one relies exclusively on a structured interview. Table 5.1 provides questions we have used with health anxiety, both for establishing diagnoses and for assessing potential treatment targets.

Providing clients with examples of some of these items can be helpful. Clinicians may, for example, want to ask specifically whether the person ever probes his body for lumps or how often he checks his moles. Clients may be embarrassed by their behaviors and may not volunteer information unless the clinician asks specific questions in a relaxed and nonjudgmental way. Obtaining detailed information about the individual's health anxiety will facilitate treatment planning.

*Additional information about Maria's experiences with health anxiety was obtained in a less structured clinical interview. Maria indicated that her partner and her friends told her that she worried too much about her health. She noted that most of her current worries were triggered by her bodily symptoms. Reading news stories about risk factors for cancer or the dangers of late diagnosis of cancer intensified her worries as well. Maria feared dying and also feared being very ill and being dependent on her partner for care. She tended to avoid going to her doctor, for fear of being diagnosed with a serious and terminal illness. She often delayed going to the doctor for months or even years when she had a new health concern. When she did go to the doctor, she was concerned that her fears were not taken seriously and that the doctor was missing the early signs of cancer. Maria described extensive checking behaviors: she repeatedly checked the inside of her mouth and nose for traces of blood, sores, or other irregularities. She monitored the color of her saliva, urine, and stool to check for blood. She also sought reassurance from her partner about the bodily symptoms she noticed. She spent hours*

**Table 5.1.** Interview Questions for Health Anxiety

| Topics | Suggested interview questions |
|---|---|
| General questions about health worries | • Are you worried about your health? Would you tell me about that?<br>• Which symptoms or illnesses do you worry about?<br>• Do you worry a lot about death and dying?<br>• What seems to set off an episode of worry about your health? Bodily symptoms? News stories about disease? Illness in a friend or family member?<br>• Do family members or friends say that you worry too much about your health?<br>• Does your doctor say you worry too much about your health? |
| Extent of difficulty with illness worries | • In the last 12 months, how many months did you worry a lot about your symptoms or about having or getting a serious illness?<br>• How much did these worries interfere with your life or activities? |
| Effects of help seeking | • Have you seen a doctor to check about the illness or symptom that concerns you?<br>• What tests or examinations have you had for this problem?<br>• Have you ever been afraid to go to the doctor because you were worried that he or she might find a serious problem?<br>• What other health care providers have you seen about this problem?<br>• How effective was the care you received? |
| Response to the doctor's evaluation | • Were you satisfied with how the doctor handled your health concerns?<br>• Do you think the doctor was mistaken in his or her diagnosis and recommendations?<br>• Are you worried that the doctor may have missed a serious health problem?<br>• Even though the doctor reassured you, did you later start worrying again about your health? |
| Checking and reassurance seeking | • Do you check your body to see if you are healthy or to see if there is something wrong? If yes, how do you do that? How often?<br>• Do you check your bodily fluids (e.g., urine, saliva, stool) to see if something is wrong? If yes, how often?<br>• Do you talk to your family and friends about your bodily symptoms to get their reactions? If yes, how often?<br>• Do you spend time reading about health problems or looking up medical information on the Internet? If yes, how much time? |
| Avoidance | • Are there things you feel uncomfortable doing because of your health concerns?<br>• Do you avoid some activities because of your health concerns?<br>• Are you bothered by things that remind you of sickness and death? Do you avoid some of these things? |

*several times a week looking up her symptoms and reviewing information about throat cancer on the Internet. Maria avoided many cues related to illness and death. She did not visit friends when they were ill, avoided hospitals, avoided reading the obituaries, never attended funerals, did not have a will, and had never discussed her funeral wishes with her partner.*

## SELF-REPORT MEASURES OF HEALTH ANXIETY

Several self-report instruments provide useful information about health anxiety. For comprehensive reviews of assessment strategies and questionnaire measures for health anxiety, somatization, and hypochondriasis, see Stewart and Watt (2001), Warwick (1995), and Speckens (2001). Measures of hypochondriasis that we typically use are the Illness Attitude Scales (IAS; Kellner, 1986, 1987) and the Whiteley Index (Pilowsky, 1967). The somatization subscale of the SCL-90R is a useful measure of somatization tendencies (Derogatis, 1975).

### Illness Attitude Scales

The IAS (Kellner, 1986, 1987) includes 27 items measuring fears, beliefs, and attitudes about health and illness. Items are rated on a five-point scale and nine scale scores may be calculated: worry about illness, concern about pain, health habits, hypochondriacal beliefs, thanatophobia, disease phobia, body preoccupation, treatment experience, and effects of symptoms. This instrument has adequate test–retest reliability and good discriminative validity, and successfully identifies patients diagnosed with hypochondriasis (e.g., Kellner et al., 1987). The internal consistency of the nine scales may, however, be problematic. Recent evaluations of the factor structure of the IAS (Stewart & Watt, 2001) suggest that the most robust factors are (a) worry about illness and pain, (b) disease conviction, (c) health habits, and (d) symptom interference with lifestyle.

### Whiteley Index

The 14-item Whiteley Index (Pilowsky, 1967) has been used for many years in the assessment of hypochondriasis (see Table 1.1 for list of items). Speckens, Spinhoven, Sloekers, Bolk, and van Hemert (1996) report satisfactory internal consistency and good test–retest reliability on this questionnaire. The Whiteley Index is also useful in identifying possible cases of hypochondriasis, but it may lack discriminative validity (e.g., it may not distinguish well between individuals with hypochondriasis and

panic disorder). A principal components analysis of this measure yielded three factors: disease fear, disease conviction, and bodily preoccupation (Pilowsky, 1967). Traditionally, it has been used with true–false responses but more recently it has been used with a five-point rating scale (Barsky et al., 1992).

### Somatization Subscale of the Symptom Checklist 90 Revised (SCL-90R)

The SCL-90R (Derogatis, 1975) is useful as a broad measure of distress targeting a range of health and mental health problems, and includes a useful 12-item somatization subscale that assesses symptoms such as headaches, dizziness, stomach pain, and back pain. Each item is rated on a five-point scale. This subscale is a valuable tool for individuals with health anxiety and somatization difficulties. The somatization subscale has good internal validity and test–retest reliability (Derogatis & Cleary, 1977).

### Other Measures of Health Anxiety

The Health Anxiety Questionnaire (Lucock & Morley, 1996), the Health Attitude Survey (Noyes, Langbehn, Happel, Sieren, & Muller, 1999), and the Health Anxiety Inventory (Salkovskis, Rimes, Warwick, & Clark, 2002) are broader in focus than the IAS and Whiteley Index, and assess a range of somatization and health anxiety. These instruments may thus be particularly useful in assessing health anxiety in community and primary care samples and in broader clinical populations.

### Measures of Death Anxiety

Individuals with health anxiety, particularly those with hypochondriasis, frequently express concern regarding death and dying (Starcevic, 2001). It is therefore useful to include self-report measures of fear of death and dying in the assessment. Although there are a range of measures available relating to death anxiety and attitudes toward death (Neimeyer, 1994), few of these have widespread clinical use.

Perhaps the most commonly used measure of death anxiety reported in the literature is the Death Anxiety Scale (Templer, 1970). Templer indicates that this questionnaire, which consists of 15 true–false statements, has satisfactory stability and internal consistency.

The Multidimensional Fear of Death Scale (MFODS) was developed by Hoelter (1979) using factor-analytic techniques. The 42 items are rated on a five-point scale and cluster into eight factors (a) fear of the dying

process (concerns regarding a painful or violent death), (b) fear of the dead, (c) fear of being destroyed (concerns about dissection or cremation for example), (d) fear for significant others (concerns about the impact of the death of the respondent on others and vice versa), (e) fear of the unknown (including fear of nonexistence), (f) fear of conscious death (including concerns about falsely being declared dead), (g) fear for the body after death, and (h) fear of premature death. Neimeyer and Moore (1994) report good test–retest reliability and construct validity for this measure. Some of the above factors (fear of the dying process, fear for significant others, fear of the unknown, and fear of premature death) may be particularly relevant for individuals with health anxiety.

The thanatophobia subscale of the Illness Attitude Scales (Kellner, 1986; Kellner et al., 1987) and the Health Anxiety Questionnaire (Lucock & Morley, 1996) each provide three items that address fear of death. The information from these items indicates whether fear of death is a concern to be followed up in the clinical interview.

Noyes, Stuart, Longley, Langbehn, and Happel (2002) have devised a new measure of death anxiety for individuals with health anxiety. The exploratory factor analysis on this questionnaire reported by the authors looks promising, but further evaluation of reliability and validity are required.

### Assessing Comorbid Problems

We typically supplement the health anxiety and somatization measures with several brief self-report questionnaires targeting other issues, such as the Beck Depression and Anxiety Inventories (Beck, 1996; Beck, Epstein, Brown, & Steer, 1988). As noted in Chapter 1, comorbid disorders are very common with health anxiety so it is helpful to assess and monitor symptoms of anxiety and depression. These issues must be incorporated into the case formulation and the treatment plan.

## DIARY MEASURES

A useful strategy for obtaining detailed and precise information about health anxiety is to have clients complete daily self-monitoring forms regarding their symptoms (Warwick, 1995). We typically have clients complete the Daily Health Anxiety Diary (see Handout 5.1) for at least one week during the assessment phase. Clients use a five-point rating scale to indicate how much they were bothered by their health worries and thoughts about dying, whether they engaged in reassurance seeking or checking,

**Handout 5.1.** Daily health anxiety diary.

Initials: _____ Day: _____ Date: _____

Below are a list of problems and concerns that people sometimes have. Please read each item carefully and circle the number to the right that best describes how much that problem has bothered you ***TODAY***.

| | Not at All | A Little Bit | Moderately | Quite a Bit | Extremely |
|---|---|---|---|---|---|
| 1. Worrying about your health. | 0 | 1 | 2 | 3 | 4 |
| 2. Worrying about bodily symptoms. | 0 | 1 | 2 | 3 | 4 |
| 3. Did your bodily symptoms stop you from working? | 0 | 1 | 2 | 3 | 4 |
| 4. Wondering whether you should visit a doctor. | 0 | 1 | 2 | 3 | 4 |
| 5. Did your bodily symptoms stop you from enjoying yourself? | 0 | 1 | 2 | 3 | 4 |
| 6. The belief that you have a serious medical illness such as cancer or heart disease. | 0 | 1 | 2 | 3 | 4 |
| 7. Worrying that you may get a serious medical illness in the future. | 0 | 1 | 2 | 3 | 4 |
| 8. Did your bodily symptoms stop you from concentrating on what you were doing? | 0 | 1 | 2 | 3 | 4 |
| 9. Did you speak to someone (e.g., your friend or relative) about your bodily symptoms? | 0 | 1 | 2 | 3 | 4 |
| 10. Did you examine your body to find out whether there is something wrong (e.g. check your pulse, examine your skin closely)? | 0 | 1 | 2 | 3 | 4 |
| 11. Thinking about dying. | 0 | 1 | 2 | 3 | 4 |
| 12. Did you spend time reading about illnesses, or watching TV programs about illnesses? | 0 | 1 | 2 | 3 | 4 |
| 13. Did you see a doctor, chiropractor or other health professional today? If YES: What type of health professional (e.g., family doctor, physiotherapist, neurologist)? | | YES | NO | | |
| 14. Did you take medications (prescriptions or non–prescription) for your symptoms? | | YES | NO | | |

| If YES: | Type: | Number of tablets: | Amount (mg): |
|---|---|---|---|
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |

and to what extent their bodily symptoms caused interference for them. They also note whether they saw a health professional that day and record their medication (prescription and nonprescription) usage. This allows both the client and the clinician to see whether there are variations in symptoms and concerns over the course of a week. This prompts discussion in the therapy session of specific triggers for anxiety, somatization, or bodily checking and provides further information for the case formulation.

Daily self-monitoring forms that we use during treatment include the Thought Diary and the Checking/Reassurance-Seeking Diary. We generally use these just prior to introducing the related treatment technique (e.g., we have the client monitor their checking behaviors for one to two weeks prior to introducing response prevention). These self-monitoring approaches are discussed in Chapters 9 (Handout 9.1) and 7 (Handout 7.1), respectively. These diaries could also be used during the intake process if the clinician needed more information to guide treatment planning.

## CASE FORMULATION

Case formulation is an essential step in developing an effective treatment plan. Information obtained from the clinician interview, self-report questionnaires, and self-monitoring data is integrated to create a comprehensive assessment. The case formulation will also guide the development of an intervention that fits the individual. Areas to be addressed in treatment are noted as well as initial treatment targets. The clinician and client together decide on how treatment will be approached, which areas will be addressed first, and which techniques will be used in treatment. One client might be best served by first working on response prevention to decrease the daily probing of her abdomen and skull for lumps and later working on her beliefs about illness. Another client might benefit more from first working on increasing life satisfaction by engaging in regular pleasurable activities and later on by addressing his avoidance of health-related situations. In individual therapy, treatment can be carefully tailored to the client. This can be accomplished to some degree in group treatment as well.

The case formulation process is a fluid one and the initial assessment will be modified as necessary over the course of treatment to accommodate new information, life events, health events, and changing symptoms. The important components of a case formulation are illustrated in Maria's situation.

*Maria's principal problem is intense anxiety about her somatic symptoms. She worries that her symptoms are indicative of throat cancer, which she feels would*

*lead to serious disability and then a lingering and painful death. Maria's childhood experiences with deaths of two young friends (one from cancer) likely contributed to the childhood onset of worry about her own health and vigilance concerning bodily symptoms. Her belief that serious illness is very common and is often missed by physicians in young people was reinforced when three of her best friends died (two of them from serious physical illness) when she was in her twenties. The young girlfriend who died of a heart attack had a congenital heart problem that had not been detected (Maria believed that medical professionals were to blame for this).*

*The precipitating factor for Maria's current episode of health anxiety was the stress of taking care of both her parents during their terminal illnesses. Her mother's death had been difficult and this contributed to Maria's belief that serious illness was intolerable and that death with dignity was impossible. Maria's health worries, bodily checking, reassurance seeking, and avoidance behaviors all escalated after her mother's death. This vigilance resulted in Maria's detecting even the slightest changes in how her throat felt, how she swallowed, and the color and consistency of her saliva and other bodily fluids. Each time she thought she detected a change, her anxiety escalated and she worried constantly about whether to go to the doctor. Her belief that doctors give only bad news and are not skillful in preventing death kept her from seeking medical care regularly. Maria put all her focus and energy into hypervigilance about her health and none at all on enjoying her life.*

*The treatment plan developed with Maria included an initial focus on decreasing her checking behaviors. Her self-monitoring diaries indicated that the bodily checking was interfering substantially in Maria's daily life and was feeding her anxiety. It was agreed that another important focus early in therapy was to work on planning some pleasurable events and positive short-term goals for herself. Other goals for CBT with Maria included learning about normal bodily changes as well as physical symptoms related to anxiety; decreasing her reassurance seeking; and exposure to illness and death-related situations such as visiting sick friends, spending time in the hospital where her mother received treatment, watching a "reality" TV program showing surgery and other medical interventions, and reading obituaries of people her age. It was also agreed that Maria would benefit from working on developing a healthier lifestyle, including increasing her exercise and improving her diet.*

## ASSESSMENT CHALLENGES

Assessment in clinical practice is often not straightforward. Below are some of the issues that the clinician should be aware of that may influence the assessment and case formulation process.

1. The client's problems with health anxiety may shift over time: the focus of health concern may change; and checking, reassurance seeking and avoidance behaviors may shift, as well. Ongoing monitoring of these areas (using, for example, self-monitoring diaries) is very important.
2. Despite the intake clinician's best efforts, the client may be reluctant to disclose some of the more embarrassing features of their problem. These may be revealed only further into treatment when the client develops greater trust in the clinician. These issues must then be incorporated into the treatment plan.
3. Clients may initially report only their central concerns. They may consider some of their more minor worries and compulsive behaviors as less relevant and may not mention these at the outset. As treatment progresses and the client makes progress with some of the major presenting issues, other concerns may assume greater importance. The therapist should not be surprised when these emerge.
4. Individuals with health anxiety may have some of the same problems with questionnaires and assessment as individuals with OCD. Clark (2004) suggests that questionnaire and interview items may trigger obsessions that are very stressful for the individual. Some individuals may also be concerned that if they give the clinician incorrect or incomplete information (in this case about their health concerns and somatic symptoms) incorrect conclusions will be drawn about their difficulties. For example, the client may worry that the clinician will decide that the headaches are reflective of muscle tension rather than a tumor because the client did not adequately describe the symptoms.

## DIAGNOSTIC CHALLENGES

As noted in Chapter 1, health anxiety is common in somatoform, anxiety, and depressive disorders. For example, hypochondriasis, panic disorder, generalized anxiety disorder (GAD), and obsessive-compulsive disorder (OCD) share common features and are frequently comorbid. Comorbidity may confuse the clinical picture: is the client's concern about death related to health anxiety or does it reflect depressive symptomatology? Does the concern about cleanliness during food preparation reflect OCD tendencies or does it relate to health anxiety (e.g., fear of getting "mad cow" disease)? The clinician must determine which diagnoses best represent a client's concerns and which problems to target first in treatment. Detailed information about the diagnostic overlap and comorbidity between health anxiety and other disorders is provided by Noyes (2001b), and Fava and Mangelli (2001).

## CONCLUSION

During the assessment and case formulation, the clinician has the opportunity to set the stage for a cooperative therapeutic relationship with the client. The goal of the assessment is to develop a detailed understanding of the various aspects of the client's functioning. Medical history, significant events related to health and death, family background, and evaluation of comorbidity may all be considered in the assessment. Information detailing the triggers for the anxiety, as well as the safety behaviors and avoidance that may be maintaining the anxiety should be obtained. Clinician evaluation and client self-report, using questionnaires and diary forms, are the central assessment strategies used to create a comprehensive case formulation that will guide treatment.

CHAPTER 6

# OVERVIEW OF COGNITIVE BEHAVIORAL TREATMENT

In this chapter, we describe each component of our CBT protocol for health anxiety to provide the clinician with practical guidelines for administering this treatment. The remaining chapters in Part II of this book provide a more detailed description of the central elements of our treatment approach. The components are not equally important nor are they all necessary for every individual with health anxiety. The specific treatment procedures used with a client should be based on a careful behavioral assessment and case formulation (see Chapter 5).

The cognitive behavioral treatment can be administered in individual or group format. In individual therapy, the interventions may be tailored more precisely to the individual's specific health concerns as identified in the behavioral assessment and case formulation. The outline below provides the clinician with a picture of how the treatment develops and at what point particular interventions are typically introduced.

A typical session includes reviewing the previous week's homework assignments, discussing new material and practicing new treatment components in session, and preparing specific homework assignments for the following week. Clients are encouraged to set aside 30–60 minutes each day to work on treatment-related activities. A brief description of each treatment component is provided below.

## INTRODUCTION TO CBT

The primary goals of the first treatment session are to develop therapeutic rapport, to provide a description of the treatment program, and to begin to introduce the tasks of the treatment program. We emphasize the importance of attending therapy sessions regularly and completing homework assignments. Many individuals come to treatment feeling that health care providers and family members do not take their illness concerns seriously, or are tired of hearing about their worries. Some have received the message that their physical symptoms are "all in their head" and that they should "just stop worrying about their health." It is very important that the therapist clearly communicate understanding that the physical symptoms experienced are real and that the worries and fears about disease are a serious problem that has significant impact on the person's life. The therapist should acknowledge that the client suffers a great deal because of the health concerns. When treatment is administered in group format, sharing stories can be very powerful. This is often the first opportunity for individuals to meet others who have similar experiences and this can be a source of much relief and ongoing support for group members.

## UNDERSTANDING THE NATURE AND CAUSES OF HEALTH ANXIETY

Individuals seeking treatment for health anxiety often wish to know why the problem developed. Our knowledge of factors in the etiology of these problems has been expanding (see Chapter 2) and it can be helpful to explore with clients the factors that may be important in their situation. We encourage clients to identify recent triggers for episodes of symptoms as well as life events that may have contributed to the development of the problem. Clients generally have little difficulty identifying the immediate triggers for an episode of health anxiety. A discussion of triggers, such as physical symptoms (for example, abdominal pain, headaches, or tingling feelings) or hearing about a certain illness in the media, may help in gaining better understanding of the nature of the anxiety and in developing therapeutic rapport. We also prompt individuals to look at family factors and their childhood experiences with illness and death. Much of this information may be available from the earlier assessment and case formulation. Additional interview questions we use to obtain information about family and personal history related to illness and death include:

- Did either of your parents worry a lot about their own health?
- Did either of your parents worry a lot about your health?

- Were you sick often as a child?
- Did you or any family member have any chronic or life-threatening illnesses?
- Did you have any especially negative experiences with doctors or hospitals that seemed to start your problem with illness worry or make it a lot worse?
- Did you experience the death of a close friend or relative during your childhood? Was the death unexpected or did it follow a lengthy illness? How did you respond?

Other potential contributing factors that we discuss are having an anxious temperament, and adverse childhood events such as abuse experiences, family conflict, and parental psychopathology. We emphasize that while these types of difficult experiences may play a significant role for some individuals, many others with health anxiety have grown up in very comfortable family situations. There is no need to search for childhood difficulties if the individual does not easily recall such events.

It is also important to discuss the terminology used in describing the problem. We prefer terms such as health anxiety, intense illness worries, functional somatic symptoms or some term that refers to the specific condition the client has been experiencing (for example, specific phobia of illness or death). In the case of hypochondriasis we use the following information:

> You may have heard the terms *hypochondriasis* or *hypochondriac* that are sometimes used when people have serious worries about their health. Hypochondriasis is a medical term that some people dislike because it has developed negative connotations and is often misunderstood and misused. Some people feel insulted if this term is used as they feel they are being labeled as a complainer. When used properly, the term hypochondriasis is a medical term to describe the experience of having intense worries and fears about disease that continue despite medical reassurance. We prefer to use the terms *health anxiety* or *intense illness worries*.

## COGNITIVE-BEHAVIORAL MODEL OF HEALTH ANXIETY

The cognitive-behavioral model suggests that health anxiety may result from misinterpretation of bodily symptoms as indicators of serious disease. Clients may try to cope with this experience by checking their bodies or seeking reassurance from family or health care providers. These strategies may temporarily reduce anxiety but, in the long run, serve to maintain the problem. We use examples of health worries from the client to illustrate how this model may be useful in understanding anxiety and the symptoms that accompany it (see Handout 3.1 in Chapter 3). We review

specific examples of triggers, bodily symptoms, and illness-related thoughts, and highlight the role of safety behaviors such as checking, reassurance seeking, and avoidance behaviors in maintaining the anxiety. This exercise provides clients with a framework to understand the factors contributing to anxiety and also provides ideas about how the anxiety cycle may be interrupted.

We have been impressed with the receptiveness of clients to the CBT model. When we began working in this area, we were prepared for some resistance to psychological approaches, particularly from individuals with significant disease conviction, but this has rarely been the case. Clients have been very receptive to considering the behaviors and cognitions that can maintain health anxiety.

A helpful exercise to illustrate how interpretation of experiences may color our reaction to them is a body-focusing experiment. We ask clients to swallow quickly three times in succession. (Please try this yourself before you read on.) Most clients find this awkward and have difficulty swallowing by the third time because there is insufficient saliva for all three swallows. We then encourage clients to focus on these sensations and to make note of any unusual symptoms in their throat. For many, this exercise can trigger thoughts that something is wrong with their throat or the swallowing function. We encourage them to consider how a continuous focus on any body sensation or symptom can quickly give rise to the belief that something is wrong. Clients often recognize that because they have spent much time focusing on their bodies, they are expert at detecting even slight changes. This can contribute to increased fears about body functioning.

## REDUCING CHECKING AND REASSURANCE SEEKING

A critical first step here is to assist clients in identifying the ways they monitor their bodies for signs of illness and seek reassurance about their health. To increase awareness of checking, reassurance seeking, and triggers for these behaviors, we ask clients to monitor these behaviors for at least 1 week using a daily record form (see Handout 7.1 in Chapter 7).

A central component of our treatment approach involves decreasing the checking and reassurance-seeking behaviors. Using the data from the diary forms, the client selects two or three behaviors as initial targets for response prevention. Some clients select behaviors they think will be easiest to stop while others choose the ones that bother them the most. The goal is to reduce or eliminate all checking and reassurance-seeking behaviors but, generally, only a few behaviors are targeted at one time. We outline several strategies for response prevention, including postponing

the checking and reassurance seeking to a later specific time, gradually decreasing the frequency of the checking/reassurance seeking, and choosing not to engage in checking/reassurance seeking (see Chapter 7). Often we work first on reducing checking and reassurance seeking and later add exposure to feared stimuli (with continued response prevention). In our experience, many clients obtain substantial benefit from response prevention alone as this also creates opportunity for extinction of the anxiety response.

## OVERCOMING AVOIDANCE OF ILLNESS-RELATED SITUATIONS

Many people cope with health anxiety by avoiding situations that cause fear or discomfort. Early in the program, we discuss the short-term and long-term effects of avoidance, highlighting the erosion of self-confidence and gradual increase in avoidance. We encourage clients to face their fears systematically and repeatedly, on a daily basis, if possible. The importance of not engaging in checking or reassurance seeking when practicing the exposure tasks is emphasized.

If the client selects exposure goals that are too difficult, the goals are broken down into smaller, more manageable steps that can be practiced regularly. Each step is worked on consistently until the anxiety is at a low or moderate level before moving on to the next step. We encourage clients to spend at least 30–60 min per day practising exposure with response prevention. Each week, clients plan out homework exposure exercises, using a daily assignment log, and keep track of their success in attempting and/or completing these assignments. Handout 6.1 provides the Daily Assignment Log and brief information for clients about practicing their goals. See Chapter 8 for more detail about in vivo exposure strategies.

## EXPOSURE TO ILLNESS WORRIES

One of the most powerful tools in helping people cope with their illness worries is exposure to the worries themselves. For many clients, this idea may be counterintuitive and unappealing at first. When we suggest writing a story that describes their most severe worries coming true, their initial reaction may not be enthusiastic. A common response is: “No thanks! I spend all my time worrying about getting cancer as it is. Why would I want to think about it even more? And write it down yet! If I write down my fears then they will come true for sure...” We have found

**Handout 6.1.** Daily assignment log: Instructions and sample form.

## PRACTISING YOUR GOALS

Our experience in helping many people with problems with illness concerns and anxiety has been that **progress depends on the amount of time you spend practicing to learn the skills you need to overcome anxiety**. If you spend a small amount of time on practice, you will make a small amount of progress. If you make practice an important priority in your life and devote a good deal of time to it, you are likely to see a large amount of progress.

**We suggest that you spend at least 30–60 minutes a day practicing. You will make more progress by doing 30 minutes every day than you will by doing 3 hours one day and nothing for the rest of the week.**

It may be difficult to set aside 30–60 minutes each day, but it is an investment of time which will have a large payoff in helping you overcome anxiety and avoidance.

Select the goals you are going to work on in the coming week and fill out the **Daily Assignment Log** for the coming week. A sample of a completed log and a blank form for you to use are included below. Many people will work on two or three goals at a time so that they have a variety of tasks to work on almost every day. Write your planned practice assignments in the spaces marked "Practice Assignments." Be specific about exactly what you are going to do. Circle the box for the day or days you plan to work on each assignment. After you have done the assignment, record the amount of time you spend working on the assignment that day. Write in any comments or observations you may have about the day's practice.

Be sure to use the coping strategies you have learned over the last few weeks as you plan and carry out the practice assignments. **REMEMBER THAT IT IS IMPORTANT NOT TO CHECK YOUR BODY FOR SYMPTOMS OF ILLNESS AND NOT TO GET REASSURANCE FROM PEOPLE AROUND YOU AS YOU WORK ON YOUR PRACTICE ASSIGNMENTS.**

At the end of the week, total the amount of time you spent on practice assignments in the week. Remember – this is an investment in your future!!

Daily assignment log – date: April 9 to April 15

| Practice assignments: | Sun | Mon | Tues | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|---|
| 1. Go for a 20 min walk outdoors every day | 15 min | 20 min | No | 30 min | 15 min | No | 30 min |
| 2. Read obituaries in the newspaper three times. Look for people my age | | ✓ | | ✓ | | | ✓ |
| 3. Watch "Terms of Endearment" or another movie with a terminally ill character | | | | | | ✓ | |
| 4. Visit my nephew in the Hospital and talk to him about how he is feeling | | | 20 min | | | | 30 min |
| 5. _____ _____ _____ _____ | | | | | | | |

**Total Time Invested in Practice This Week: _____**

Daily assignment log – date: _____ to _____

| Practice assignments: | Sun | Mon | Tues | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|---|
| 1. _____ | | | | | | | |
| 2. _____ | | | | | | | |
| 3. _____ | | | | | | | |
| 4. _____ | | | | | | | |
| 5. _____ | | | | | | | |

**Total Time Invested in Practice This Week:** _____

that providing clients with a clear rationale increases their receptiveness to this task. We also provide several sample stories illustrating common illness fears. Clients write their own stories (with the help of the therapist, if necessary) and use them to facilitate imaginal exposure to the worries for at least 30 minutes per day. When the story only elicits moderate or low levels of anxiety, the client then writes a new story that describes other fears and produces a higher level of anxiety again. Once people try this strategy, they generally come to value it because it can quickly take the intensity and power out of their worries. See Chapter 8 for sample exposure stories and for more detail about this technique.

## EXPOSURE TO BODILY SYMPTOMS (INTEROCEPTIVE EXPOSURE)

When people worry about their health, they tend to focus on bodily symptoms and may be very aware of even small changes in their bodily functioning. Some clients may avoid activities that produce uncomfortable physical sensations. We encourage clients to identify any bodily sensations that trigger anxiety and any activities they avoid because of fear of uncomfortable bodily sensations.

Repeated exposure to situations that trigger anxiety and engaging in physical activities that cause the uncomfortable sensations will provide opportunities for exposure to frightening bodily sensations. For bodily sensations that are difficult to produce deliberately (such as a rash, a headache or a lump), imaginal exposure strategies can be very helpful. As with the illness stories, clients are asked to describe in vivid terms the bodily symptom they fear, the worries and doubts they experience when they have this symptom, and the catastrophic results that worry them. See Chapter 8 for additional detail.

## COGNITIVE REAPPRAISAL

In this component of treatment, clients are encouraged to examine their illness-related thoughts. The steps involved in modifying thinking patterns include learning to identify negative thoughts as they occur, evaluating how realistic they are, developing alternative appraisals, and increasing acceptance of the reality of illness and death.

Early in treatment, the focus is on identifying unrealistic thoughts related to health anxiety. Clients are then encouraged to consider less

catastrophic interpretations of the symptoms that are the focus of worry. We also prompt clients to assess the probability that the feared illness (e.g., a brain tumor), will happen, especially in the near future. Serious illness will occur at some point for all of us, so we emphasize the importance of considering how clients will cope when health problems arise for them and for family members. Cognitive reappraisal strategies also include helping clients develop more realistic health beliefs to increase their acceptance of bothersome physical sensations and to increase their tolerance for uncertainty about the cause of specific symptoms. See Chapter 9 for more detail regarding the cognitive components of treatment.

## COPING WITH FEAR OF DEATH

Many individuals who are experiencing problems with health anxiety find that they are preoccupied with fear of death. This fear may create intense distress, limit pleasure and satisfaction in life, disrupt close relationships, and distract from working effectively. Some clients report that they try very hard not to think about death and avoid situations that remind them of death. The focus of this component of treatment is on accepting the reality of death. As described in Chapter 10, we encourage clients to identify areas of avoidance and then to develop a systematic plan of graduated exposure to death-related themes. Fear of death can also be reduced by encouraging clients to develop personal goals and work towards enhanced life satisfaction.

## ESTABLISHING PERSONAL GOALS

Individuals who are struggling with anxiety are often distracted from a healthy pursuit of life goals. An increased focus on positive goals can help in managing negative emotions. We encourage clients to consider what they want out of life by imagining a life that is not hampered by worry or anxiety. Clients complete a Goal Sheet (see Chapter 11, Handout 11.2) that prompts them to consider life goals, medium-term goals, and short-term goals. Life goals can be quite broad. Medium-term goals are those that could be addressed within the next year and short-term goals are ones that the client can begin working on within the next 3 months. Clients are encouraged to select specific and concrete medium and short-term goals so that they can clearly evaluate their progress towards each goal.

## BUILDING LIFE SATISFACTION

Just as clients may be neglecting their goals when they are preoccupied with negative emotions, they may also be distracted from enjoyable activities. Focusing on increasing life satisfaction may help to improve their mood and reduce anxiety. For some individuals, this may be one of the most important aspects of treatment. Clients are encouraged to monitor the activities that give them a sense of pleasure or satisfaction for at least one week. Many individuals recognize the need to incorporate more enjoyment into their lives and they are encouraged to plan more satisfying and pleasant activities on a daily basis. More detail on these issues is provided in Chapter 11.

## DEALING WITH HEALTH INFORMATION

For some people, health information in the media can be a trigger for health worries. There is a steady stream of stories about the threat of serious diseases, ways to prevent diseases, "miracle cures," and side effects of medicines. These stories can trigger significant illness worries and catastrophic thoughts among vulnerable individuals. Some people make significant changes in their lives in response to these stories. It can be very challenging to know how to interpret the conflicting information in the media. We encourage our clients to become critical consumers of health information. We remind them that the media often overplay health risks to increase the dramatic impact of stories to capture the attention of a public that may be very jaded about health issues. We also encourage our clients to consider the source of the information. For example, health information gleaned from a review of scientific studies published in reputable professional journals is certainly more reliable than information obtained from an obscure Web site with few or no references. Media stories are often based on the results of a single study and therefore should not be given too much credence. Clients are encouraged not to make sudden lifestyle, medication or dietary changes because of a single health-related news item or based primarily on anxiety.

## SETBACKS AND RELAPSE PREVENTION

Most individuals who have made progress in overcoming health anxiety will experience periods of increased anxiety or worry. Setbacks can present

a substantial challenge for the client and for the treatment process. Our approach is to prepare clients for the inevitability of setbacks and to help them develop strategies for coping with them. We encourage clients to plan for periods of increased anxiety, to identify potential triggers for setbacks and to maintain their goal-oriented focus with continued exposure and response prevention practice. See Chapter 13 and Handout 13.1 for details about this approach.

## PUTTING IT ALL TOGETHER

The outline provided in this chapter is not intended as a rigid structure but, rather, is meant to guide the clinician in considering how the different treatment strategies can be introduced. The specific treatment components emphasized and the order in which they are presented will vary depending on the client's concerns. Typically, the introductory components (introduction to CBT, understanding the problem, and the cognitive-behavioral model of health anxiety) are covered at the beginning of treatment for all clients. It is often useful to work on reducing checking and reassurance seeking (if these are important aspects of the problem) early in the treatment because this can produce quick and substantial improvement. Starting the work on exposure to illness worries early in the treatment is also often effective as this typically targets the core of the problem. We try to balance work on overcoming anxiety symptoms with work on clarifying goals and increasing life satisfaction. Usually each treatment session allows time to address several of these issues rather than focusing on only one topic at a time. Problems identified in the assessment phase as being particularly important for the client are often addressed earlier in the treatment and may require more emphasis throughout treatment. For example, if it is clear that a client has no fun in life and the clinician and client agree that this should be an early target in treatment, the material on life satisfaction may be introduced very early in treatment (perhaps in the second or third session).

It is also important to remember that treatment strategies should be continued throughout the course of treatment. So, for example, response prevention may be introduced for the first time in the third session but this strategy remains important throughout the treatment, and should be emphasized again when the individual is engaging in exposure or when anxiety is increased for other reasons. Similarly, we may first address cognitive strategies early in treatment but these should be reviewed in later sessions as well.

CHAPTER 7

# RESPONSE PREVENTION AND COPING WITH PHYSICAL SYMPTOMS

## BODILY SYMPTOMS AND HEALTH ANXIETY

Most individuals identify body symptoms as a major factor in the onset of their problems with health anxiety and also as triggers for specific episodes of worry. The bodily symptoms may be chronic, bothersome symptoms such as headaches or intestinal disturbance, or they may be new, unexpected physical sensations such as heart palpitations or a skin rash.

Individuals have different ways of handling changes in their bodily functioning. A person may react to a bothersome symptom with thoughts such as, "I have had this headache for days now so this must be something serious," and, "I have heard that bad headaches can be a sign of a brain tumor." Other individuals may respond to similar symptoms with thoughts like: "I have had this headache for days now. I think this means I need to get more sleep," or "This is a really bad headache so I think I will take a pain reliever." They may turn their attention to getting dinner

ready or going for a walk outdoors rather than focusing further on the headache. Certainly, the first individual is more likely to feel anxious than the second. When people feel anxious about a particular symptom they are more likely to focus on that symptom. This may result in a tendency to check the body for symptoms and also to seek reassurance about their health from medical professionals and family members.

A wide variety of bodily symptoms or physiological changes may cause anxiety. The more common ones include problems with pain (e.g., headaches, abdominal pain, back pain, and joint pain), heart-related symptoms (e.g., palpitations, tachycardia, chest pain, and pressure in the chest), lumps, skin changes (e.g., rash, moles), dizziness, tingling sensations in the arms and legs, visual disturbances, and changes in bodily fluids (e.g., seeing a red or black color in the stool).

Usually, clients worry about one or two specific symptoms, but the kinds of symptoms that are the focus of concern may vary considerably over time. For some individuals, however, it may always be the same type of physical concern that triggers an episode of health anxiety.

*Pauline: Is this stomach cancer?*

*Pauline is a 63-year-old homemaker. She describes a life-long history of worries about her health. Her anxiety levels wax and wane, depending on the physical symptoms she experiences. She has had a number of extended periods when she felt healthy, had few physical symptoms, and was not worried about illness. In recent years, however, she has been very worried about having stomach or bowel cancer. She experiences many abdominal symptoms including bloating, heartburn, nausea, constipation, diarrhea, and pain. She has these symptoms on a daily basis and each time she ends up feeling very anxious about her health. She worries that the doctors have missed early signs of cancer or that the cancer has appeared since her last check-up. Pauline also reports worries about other illnesses. For example, when she experiences bad headaches she worries about brain tumors and aneurysms. A rash on her leg prompts fears of skin cancer. Pauline maintains an active lifestyle and tries to eat a healthy diet. She has difficulty, however, in maintaining adequate fiber intake.*

## Focusing on Bodily Symptoms

Focusing on the body can intensify normal body sensations. We have clients experiment with this in several ways. In the therapy session, we will have clients try the following simple exercise as described in Chapter 6: *Swallow three times as quickly as you can*. Clients are then prompted to consider how they felt. Did they feel awkward? Did they feel unable to swallow properly the third time? Some clients find this exercise stimulates thoughts that their throat is not working normally. In fact, swallowing

three times in quick succession is difficult for everyone because we simply do not produce enough saliva to do this. This exercise allows individuals to see how focusing on swallowing (or any other body sensation) can quickly lead to the thought that something is wrong with the body. These misinterpretations then lead to anxiety.

Another exercise that can be used in the therapy session focuses on the sensations that are constantly present in our body. It will be helpful if you, the reader, try this out just after reading the following instructions.

*While you are sitting, focus your attention on one of your feet resting on the floor. As you focus all of your attention on that foot, notice the sensations you feel: the pressure of your foot on the floor, the feeling around your toes, the feeling on the top of your foot, and the sensations from your ankle. Focus on those sensations for a moment [pause for 60 seconds]. What did you notice? Did you feel the pressure on the bottom of your foot? Any sensations coming from your toes? Are the sensations pleasant or uncomfortable? Any feelings of unpleasant pressure or pain?*

The clinician then goes on to explain as follows:

*Your brain is receiving sensations from your foot and all the other areas of your body that are capable of producing sensations 24 hours a day, 7 days a week. Your brain functions so that it screens out most of this information so that you can concentrate on other activities. If you focus your attention on an area of the body you will notice sensations there that you did not notice before. Some of these sensations may be unpleasant and you may interpret them in frightening ways. If you are worried about discomfort or pain in a particular area the sensations from this area capture your attention more easily.*

Finally, an exercise to demonstrate the impact of focusing on bodily symptoms is typically given as a homework assignment. Clients are asked to select one or two bodily sensations that cause them worry, such as increased heart rate, stomach discomfort, or visual symptoms. First, they rate their anxiety level and then they spend 10 or 20 minutes focusing specifically on that part of the body. We provide the following instructions for this exercise:

*Focus your attention on your stomach. Concentrate on exactly how your stomach feels right now. Notice any bloating, gassy feelings and other discomfort. Focus on your whole abdomen. Does your right side feel a bit different from your left side? What else do you notice? If you notice any discomfort, zero in on that. After 10 or 20 minutes, rate your anxiety level. Do you find yourself feeling more anxious as you focus on this body part? What negative thoughts are you having? Are you noticing more and more uncomfortable feelings in your stomach?*

This exercise helps individuals recognize that focusing on bodily symptoms increases anxiety, and increases skill at detecting even slight changes in bodily functioning.

## ANXIETY ABOUT THE HEALTH OF LOVED ONES

Health worries may also be triggered by bodily symptoms in a loved one. For example, some parents are extremely worried about their children's health. This is particularly common in new parents and in families with a child who has a diagnosed medical problem.

*Stephen came to our clinic because of his worries about his 10-year-old daughter's diabetes. Diabetes is obviously a significant medical problem and a challenge for parents and their children. Stephen reported that he doubled or tripled the daily frequency of blood sugar level tests recommended by the daughter's endocrinologist. Needless to say, his daughter Kelly did not appreciate this! He also checked her lunch bag repeatedly to ensure there were no inappropriate foods. He quizzed Kelly and her teachers after school to ensure she had only eaten the food her parents had sent to the school and that her glucose monitoring had been completed and recorded accurately. He was similarly vigilant about Kelly's food intake at home. Stephen recognized that his excessive concern was unhelpful and was placing unnecessary stress on his child and family.*

Perhaps because young children are able to provide only limited information about their symptoms (e.g., crying in distress), parents often feel helpless when caring for infants or toddlers. Health anxiety often arises in parents who are dealing with symptoms such as fever or flu for the first time. They may be uncertain how to evaluate the seriousness of the situation and may worry about ignoring a symptom that turns out to be serious. One of the authors can attest to this from personal experience. When my daughter was diagnosed with pneumonia at age two, health care professionals gave me a lecture (doubtless well-meaning but stressful nonetheless) about assessing the nature of a child's breathing to determine whether prompt medical attention is necessary. Since then, I find myself worrying every time my daughter has a cold or a cough. I check my little girl's rib cage to try to assess whether her breathing is labored. I struggle with uncertainty about whether her breathing is rapid and will ask my husband to evaluate this as well.

## CHECKING AND REASSURANCE SEEKING

### Checking for Symptoms

As described in Chapter 3, one way that many clients attempt to cope with anxiety about bodily symptoms and illness is to repeatedly check some aspect of their health. The type of checking depends upon the

nature of their fear. For example, a person who is concerned about a rash on his arm may visually inspect his skin several times a day looking for changes (improvement or worsening) in the rash. He may check other parts of his body as well to see if the rash has spread. An important component of treatment involves the identification of specific checking behaviors. Some clients are very aware of ways in which they check their bodies for symptoms of illness. Other individuals may be less aware of checking behaviors that have become automatic and habitual. Reviewing common checking strategies with clients (see Table 7.1) may help identify ways that they monitor their bodies for signs of illness. It is important for the clinician to be aware that some clients find their checking behaviors embarrassing and difficult to discuss.

**Table 7.1.** Bodily symptoms and common checking behaviors

| Feared bodily signs or symptoms | Checking/monitoring behavior |
|---|---|
| Pain | • Monitoring intensity of pain<br>• Monitoring location of pain<br>• Monitoring duration of pain |
| Heart-related symptoms | • Measuring pulse or heart rate<br>• Measuring blood pressure<br>• Placing hand over heart to check for palpitations or skipped beats<br>• Monitoring chest pain |
| Lumps | • Frequent breast self-examination<br>• Probing abdomen<br>• Feeling skin surface |
| Skin condition | • Inspecting rash<br>• Picking at sores to see if healed<br>• Monitoring changes in size and color of moles and freckles |
| Neurological symptoms | • Monitoring dizziness<br>• Monitoring sensations of tingling or numbness<br>• Monitoring visual disturbances |
| Bodily fluids | • Checking stool, urine, and saliva for:<br>  • traces of blood<br>  • change in color<br>  • change in quantity/frequency |
| Miscellaneous | • Monitoring weight to check for weight loss<br>• Checking breathing for signs of allergic reaction |

*Pauline: Is this stomach cancer?*

*Pauline engages in a variety of checking behaviors. She has a routine of probing her abdomen every morning before she gets out of bed. She feels for lumps, painful areas, and bloating. After every meal, Pauline monitors her levels of nausea as she believes that nausea after eating is associated with stomach cancer. When she has a bowel movement, she inspects her stool to check for traces of blood or other abnormalities. She also tracks the frequency and regularity of her bowel movements.*

Checking behaviors may target the physical symptoms of loved ones. The author's behavior of checking her daughter's breathing when she has a cough is a good example of this. Some clients will also ask significant others to become involved in their monitoring. One client, for example, asked her spouse to repeatedly inspect her moles to determine whether they looked like skin cancer.

## Searching for Reassurance

Another strategy to cope with illness fears is seeking reassurance that bodily symptoms or observed changes are not signs of serious illness. Clients may:

- Ask a family member or friend about symptoms
- Have a family member or friend check the symptom
- Go to a family doctor or specialist to inquire about symptoms or a feared illness
- Make plans to seek medical attention
- Review symptoms in an article or medical book
- Search the Internet for information about the symptoms or feared illness
- Compare their symptoms to someone else's symptoms

*Pauline: Is this stomach cancer?*

*Pauline sees her family doctor at least once a month to discuss her symptoms and her concerns about cancer. She also has appointments with a gastrointestinal specialist every few months. Pauline has had regular workups to evaluate her stomach and bowel concerns, including repeated colonoscopies and barium swallows. She went to a private medical clinic for a week-long intensive work-up and was frustrated by the limited diagnostic information she received. Pauline attends medical appointments prepared with lists of questions about her symptoms and concerns. She spends a lot of time reading about health issues and will often bring in articles about intestinal diseases to discuss. Whenever she hears about someone who has been diagnosed with cancer, she tries to find out what kinds of symptoms that person was experiencing prior to diagnosis. Her husband provides reassurance about her health every day.*

## Preventing Health Problems

Some individuals cope with health anxiety by doing everything possible to maximize their physical health and avoid illness. They may follow every guideline about healthy eating and avoid foods that they believe may be related to heart disease or cancer. They exercise daily, take nutritional supplements, and use megadoses of vitamins. All of these behaviors may promote good health, but when practiced excessively or in a rigid way they increase anxiety, rather than improving quality of life. The client may describe worries about whether the right foods are being eaten or whether the doses of vitamins are correct. The ever-changing information provided by the media and health professionals about nutrition, environmental factors, exercise, and lifestyle may be very stressful for these individuals.

*Amanda is a 37-year-old computer programmer. When she came to our clinic for help, she was struggling with a constant fear that she had breast cancer and that early signs of this disease had been missed. One way that Amanda managed her worries was by living very carefully so as not to increase her cancer risk. She avoided all unhealthy foods and exercised regularly (admirable behaviors to which many of us aspire!). She also avoided cell phones, pesticides, food additives, and household products such as paint and hairspray because she feared they might cause cancer. At work, she became fearful that sitting in front of a computer terminal every day was exposing her to excessive radiation. At first she coped with this by pushing her chair as far away from her computer monitor as she could and by regularly turning her computer off during breaks. Ultimately, she took sick leave from work because of her anxiety. Her family physician recommended a trial of antidepressant medication, but Amanda feared the long-term effects of this medication and so did not pursue this treatment.*

## Monitoring Checking and Reassurance-Seeking

We emphasize the importance of increasing awareness of checking and reassurance-seeking behaviors. Clients use a diary form to monitor these behaviors (see Handout 7.1). Each time clients notice themselves checking their bodies or asking for reassurance about their health, they note the situation and the anxious thoughts, anxiety level before the checking or reassurance seeking, details of this behavior, and anxiety level afterwards. Depending on the complexity and frequency of these behaviors, an individual may select only one or two behaviors at a time to facilitate accurate monitoring. Excessive health promotion behaviors can be documented in a similar fashion.

**Handout 7.1.** Checking and reassurance seeking diary.

| Date & time | Situation and anxious thought | Beginning anxiety (0–10) | Description of checking or reassurance seeking | Ending anxiety (0–10) |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| *Scale for rating intensity of anxiety* | | | | |
|---|---|---|---|---|
| 0 1 2 3 4 | 5 6 | 7 8 | 9 10 | |
| None | Mild | Moderate | Severe | Very severe |
| Relaxed, no discomfort | Not quite relaxed, just noticeable discomfort | Definite discomfort, but managing it | Extremely uncomfortable; feel it becoming unmanageable | Worst I have ever felt-overwhelming |

### Impact of Checking and Reassurance-Seeking Behaviors

It is important to review with clients both the immediate and long-term effects of the checking and reassurance-seeking behaviors. Handout 3.1 (the CBT model) is used to illustrate these relationships. The diaries can also help individuals determine how these behaviors affect their health worries. Many clients find that the immediate effect of checking or seeking reassurance from others is that they feel calmer. For example, a person who worries about skin cancer may feel less anxious after checking her moles and finding nothing unusual. The problem with these strategies, however, is that the decrease in anxiety is generally short-lived. Most individuals find that their worries return quickly when a new symptom arises or simply because they fear they did not obtain adequate reassurance or check the symptoms thoroughly enough. Checking behaviors may also result in increased anxiety because checking may sometimes reveal a symptom or information that causes concern. For example, if a person checks her pulse many times throughout the day, she will sometimes find an increased heart rate (perhaps related to anxiety, excitement, or other emotional arousal). If the individual believes that changes in heart rate signal disease, she will experience substantial anxiety. For some clients, checking seems to be a preventative strategy. They engage in checking because they fear that if they do not check their symptoms they will be even more worried about them. Many clients report that checking and reassurance-seeking behaviors have increased in frequency over time and have become very intrusive in daily life.

## RESPONSE PREVENTION

After several days of monitoring checking and reassurance-seeking behaviors, clients may be encouraged to select one to three behaviors that they wish to decrease or eliminate. Initially, these may be either behaviors the client finds particularly bothersome or ones they think might be easiest to stop. Most individuals find it easier to work on only a few behaviors at a time but, over the course of treatment, all the checking and reassurance-seeking behaviors are addressed. We also consider excessive or stereotyped use of health foods, vitamin supplements, and other health-promoting behaviors (such as excessive exercise) as potential targets for response prevention if behavioral analysis suggests that they play an anxiety-reducing rather than health-promoting role. Starting response prevention early in treatment is desirable as most clients find they can implement this approach successfully and often report quick reduction in anxiety levels.

Response prevention used in conjunction with exposure (ERP) is a well-established treatment for OCD. Numerous studies have evaluated the efficacy of ERP and there are several excellent reviews of outcome studies addressing ERP with OCD (e.g., Abramowitz, Brigidi, & Roche, 2001; Foa & Kozak, 1996; Marks, 1997). To date, there has been limited research specifically evaluating the use of response prevention (with or without exposure) for health anxiety. Salkovskis and Warwick (1986) provide perhaps the only study looking specifically at the role of response prevention in hypochondriasis. They found this intervention to be helpful in reducing health anxiety, illness beliefs, and reassurance seeking (see Chapter 4 for a more detailed review of this study). Many of the CBT protocols that have demonstrated effectiveness with hypochondriasis and other presentations of health anxiety do incorporate response prevention as part of multicomponent treatments (e.g., Barsky & Ahern, 2004; Bouman & Visser, 1998; Clark et al., 1998; Visser & Bouman, 1992; Warwick et al., 1996). Further research is needed to establish the efficacy of response prevention with this population but it is likely that reduction of checking and reassurance seeking is a critical component of successful treatment.

Many applications of response prevention for OCD involve the simultaneous introduction of both exposure and response prevention. We generally prefer to introduce these techniques one at a time because this seems to be less overwhelming for the individual. Many clients benefit from response prevention alone as this also creates opportunity for extinction of the anxiety response. We then incorporate systematic exposure to feared illness-related stimuli plus response prevention (see Chapter 8).

Foa and Wilson (2001) suggest several strategies for reducing checking and reassurance seeking in "Stop Obsessing," their classic self-help book for OCD:

1. Postpone the checking/reassurance seeking to a later specific time. A client may try, for example, to delay reading up on the symptoms of brain tumors for an hour, or if she can, for a day. Another example would be to wait an extra hour before checking the pulse. How long the client postpones the checking or reassurance seeking is a decision reached cooperatively with the therapist, based on what the client thinks she can manage. When clients postpone checking they sometimes find that the urge passes.
2. Gradually decrease the frequency of checking and reassurance seeking. For example, if a client presently asks his wife about his bodily symptoms two or three times per day, he may start by decreasing this to only

once per day. After a few days, this can be reduced further, to perhaps once every two days, then twice per week and so on.

3. Stop engaging in the checking and reassurance seeking altogether. When the client feels ready, she can choose to stop engaging in specific checking or reassurance behaviors. For example, the client may decide to stop probing the abdomen to look for lumps.

Clients often select different tactics for different checking and reassurance-seeking behaviors or they may experiment with the three strategies to find out which one works best for them in different situations. Regardless of how the client proceeds with the response prevention, they must be prepared for the possibility of a short-term increase in anxiety. This generally does not last long, and most clients find that reducing their checking and reassurance seeking results in less anxiety and fear. We encourage clients to accept the increase in anxiety that often comes with response prevention without trying to change it. Monitoring these behaviors and associated anxiety levels allows the client to assess the effectiveness of the response prevention.

*Pauline: Is this stomach cancer?*

*Pauline selected her morning ritual of probing her abdomen as the first checking behavior to eliminate. She agreed that this behavior was unnecessary and started her day off poorly. Because she initially felt incapable of completely eliminating this behavior, Pauline first chose to postpone the checking until after breakfast (one hour later). After several days of this she was able to stop probing her stomach completely. She noted that her mood was better and that she spent less time in the morning focusing on her symptoms and worrying about cancer. Pauline's second target for response prevention was monitoring her nausea level after eating. She found it helpful to engage in an alternative activity after every meal. She chose to do a variety of things at these times, including going for a brisk walk, chatting with her neighbor, and going to her volunteer job in the local library. Pauline found that by being physically active or engaged in social interactions, she was able to resist an excessive focus on monitoring her stomach for signs of nausea and illness. Later in treatment, Pauline decided to stop monitoring her bowel movements. She stopped looking at her stool and no longer kept track of the regularity of her movements.*

*Pauline did not have much difficulty reducing her checking behaviors. She found it much more challenging to limit her attempts to obtain reassurance from others, especially from medical professionals. She agreed to begin by restricting the amount of time she could spend each day reading about health and illness. At the start of treatment she averaged approximately 2 hours per day reading medical books and health articles in popular magazines. This was gradually*

*decreased over several weeks until she was no longer reading any such information. After three weeks of complete response prevention in this area, the therapist encouraged Pauline to start reading modest amounts of health information but not to deliberately seek it out. The goal of this recommendation was to prevent the development of avoidance of health-related stories. Reading the entire local newspaper, including any health-related articles that appeared in it that day, seemed to hit the right balance for Pauline.*

*The family physician was very amenable to working with Pauline and the psychologist to reduce her health care visits and her requests for further diagnostic tests. It was agreed that Pauline would benefit from regularly scheduled physician appointments every 2 weeks. Pauline had typically gone to the doctor on an urgent basis, sometimes every week and at other times once per month. Changing this to planned visits was very important. The frequency of appointments was gradually reduced over a period of many months until Pauline was seeing her family doctor every month. She continued to see the gastrointestinal specialist every three months, as well, but this was also changed to a planned visit, rather than an urgent visit during an episode of anxiety.*

*Although Pauline's requests for reassurance from her husband and other relatives were never a specific target of response prevention, Pauline reported that these behaviors decreased over the course of treatment. Later in treatment, she indicated that she could no longer remember the last time her husband had rolled his eyes over one of her requests or called her a hypochondriac. She felt that this progress contributed to her improved marital relationship.*

## Involvement of Significant Others

Family members and friends are often involved in the client's checking and reassurance-seeking behaviors. For example, a spouse might be asked to repeatedly examine the moles on their partner's skin to see if they have changed size or color. Similarly, friends may often be on the receiving end of questions such as, "Do you think I should go to the doctor to ask about this lump/rash/headache?" or "Have you ever felt your heart skip beats?" It is helpful to involve significant others in the response prevention if they participate in the checking and reassurance seeking. We encourage clients to discuss their response prevention goals with their partners and to decide how they would like their partner or others around them to respond when checking and reassurance-seeking behaviors arise. It may be useful to arrange a session with the client and the significant other to discuss these issues and to develop a cooperative approach to reduce these behaviors.

## COPING EFFECTIVELY WITH BODILY SYMPTOMS

There are several approaches that may help clients cope with uncomfortable or frightening physical symptoms. These include:

- Education about common physical symptoms such as changes caused by anxiety and tension
- Education about when seeking medical attention is warranted
- Exposure to the uncomfortable physical symptoms, which may involve in vivo and imaginal procedures
- Strategies related to increasing acceptance of physical symptoms
- Relaxation techniques to reduce symptoms caused by anxiety, stress, and tension.

### Education About Physical Symptoms

Many clients are unaware of the many natural changes that occur regularly in our bodies. Providing basic information about these physiological processes can be helpful. We provide clients with Handout 7.2 to give them an overview of normal physical symptoms as well as common symptoms that may result from anxiety and tension.

### Education About When to Seek Medical Attention

A challenging issue for individuals with health anxiety and for their treatment providers is determining when it is appropriate to seek medical attention about a bodily symptom. There is no simple or single answer to this question. For many symptoms, including pain and colds, we recommend the "wait-for-two-weeks" approach. Most such symptoms disappear of their own accord in two weeks and do not require medical attention. If the symptoms persist beyond this period, it is reasonable to see the doctor for evaluation. Many people have learned through personal experience the situations when it is wise to seek prompt medical attention: high fever, intense pain, and signs of a worsening infection. Most clients are also familiar with self-care approaches for symptoms of a cold or flu, headache, or backache. Involving the family doctor in providing clients with other general guidelines for when they should seek medical help can be very useful.

**Handout 7.2.** Your noisy body: What is going on inside your skin?

There are many natural changes that occur regularly in our bodies. For example, our body temperature may vary over the course of the day by up to two degrees Fahrenheit. It is sometimes helpful to think of our bodies as "noisy." There is always lots of activity going on inside your body and if you pay attention you will certainly notice many symptoms, some of which might seem strange and frightening, but are actually normal and healthy.

Emotions can also cause many changes in your body. For example, your heart rate increases when you are excited or sexually aroused. As you probably know, anger can cause muscle tension, stomach discomfort, increased heart rate, and flushing.

Nausea, dizziness, and headaches are all normal bodily symptoms when you are hungry or mildly dehydrated. Did you skip breakfast today? When did you last have a nutritious snack? If you are dehydrated, drinking a glass of water, juice, milk, or herbal tea might help. If you are used to drinking caffeinated coffee, that headache you have might be due to the fact that you missed your regular cup of coffee this morning.

Anxiety and tension can also produce many physical symptoms including:

- Constipation, diarrhea, nausea, stomach cramps, and vomiting
- Increased heart rate, a temporary spike in blood pressure, shortness of breath, pressure in the chest, and chest pain
- Headaches, dizziness, lightheadedness, feeling faint, and tingling of the extremities
- Pain symptoms related to muscle tension including neck pain, back pain, and headaches
- Other symptoms such as sweating, flushing, and fatigue.

Although this is a lengthy list of symptoms, it is by no means exhaustive. You will probably be able to think of other symptoms you get when you are tense and stressed. Take a few minutes now to write a list of all the bodily symptoms you get when you are anxious or tense. You can see how much impact anxiety and tension has on the body and the dramatic (but temporary!) physical symptoms that may result.

## Establishing Appropriate Frequencies for Health-Related Behaviors

A significant challenge when working on checking, reassurance-seeking and health-promoting behaviors is determining whether such behaviors are excessive. If the behavior is excessive and detrimental, how does one then establish the "ideal" frequency for the behavior? Some health care recommendations are relatively clear and consistent. For example, it is generally recommended that women conduct breast self-examinations (BSE) on a monthly basis. Most women and health care providers would agree that daily BSEs are neither helpful nor necessary. Other directives are much less clear and specific. For example, while we are generally told that blood in the stool should be brought to the attention of a physician, exactly what does this mean? Should we inspect every bowel movement for traces of blood? What about our children's stool? If we see something that might be blood, should we go to the doctor immediately? Or can this wait until our next scheduled appointment? Discussing these types of issues in therapy can help establish normative and reasonable behaviors.

## Acceptance of Physical Symptoms

An interesting strategy that may be very important in reducing health anxiety is helping clients increase their acceptance of uncomfortable bodily sensations, such as pain or dizziness. Many individuals who experience such symptoms try to avoid or eliminate them. They may seek treatment after treatment to try to eliminate the symptom, or they may use alcohol or excessive pain medication to try to numb the sensations. Acceptance involves calmly facing the reality that the symptom is a part of life, that it may continue for some time, and that it is best to move on with life in spite of the symptom. Acceptance involves striving to face the experience with a sense of calm rather than desperation and letting go of the struggle to avoid or eliminate the symptom. Increasing acceptance of bodily sensations may ultimately result in reduced symptoms and increased ability to cope with symptoms when they arise. This strategy is addressed in more detail in Chapter 9.

## Exposure to Physical Symptoms

Planned and repeated exposure to uncomfortable bodily symptoms will lead to reduced anxiety when these symptoms occur. This is important because, as noted earlier, physical symptoms are an inevitable aspect of human experience. Exposure strategies can include in vivo, imaginal, or

interoceptive exposure to the feared bodily symptoms (described in detail in Chapter 8).

Clients can also be encouraged to take advantage of natural opportunities that arise to work on new ways of approaching uncomfortable symptoms. When the symptoms occur naturally, it is useful for the client to grab onto the symptom rather than trying to avoid or escape it. We encourage clients to deliberately hold onto the symptom and to try to make it stronger, rather than reducing it by redirecting their attention (distraction). When clients focus on the symptom and try to maintain it, they often find that the symptom becomes more intense initially, but then they have trouble making it stronger and eventually they have difficulty concentrating on the sensation. Clients thus develop the more realistic perspective that physical symptoms come and go, rather than being terrible experiences that must be feared and avoided. This approach helps clients remain calm about bodily sensations and to accept rather than dread them.

## Relaxation Techniques

Although our ultimate treatment goal is for the individual to be able to experience physical symptoms without becoming anxious, it is also helpful to provide clients with tools to decrease their autonomic arousal and tension so they may have greater control over these symptoms. We generally recommend that clients experiment with a variety of relaxation techniques, including diaphragmatic breathing, progressive muscle relaxation, and imagery relaxation. Detailed instructions for these techniques are available in many anxiety treatment manuals (e.g., Suinn, 1990). We provide written information about each of these techniques and an explanation of how relaxation techniques can be useful. We may practice the techniques during therapy sessions to ensure that the client is familiar with each strategy and then we encourage daily practice that is recorded on a relaxation practice log. Clients monitor how the relaxation affects their anxiety and tension level. Some individuals find that their anxiety increases at first, likely because of the focus on the body during the relaxation practice (particularly for the breathing and muscle relaxation approaches). We encourage our clients to initially practice the relaxation exercises when they are not particularly anxious and in situations where there are minimal distractions. As they become familiar with each technique, the client may use them in increasingly challenging situations. Over time, many clients find the relaxation strategies quite helpful.

Relaxation strategies are not limited to formal techniques. Encouraging clients to engage in activities that provide them with feelings

of relaxation is very important. Going for walks, enjoying the outdoors, sexual activity, chatting with a friend, spending time with a pet, soaking in a hot tub, or getting a massage are all potentially relaxing and enjoyable activities. Enjoying the moment can be an important way of increasing relaxation and can be helpful in reducing and managing uncomfortable bodily symptoms.

## CONCLUSION

Bodily symptoms are possibly the most frequent triggers for health anxiety. Monitoring and checking the body for signs of illness and seeking reassurance about health from various sources (e.g., family members, physicians, or the Internet) are common, but generally ineffective, strategies to manage anxiety about bodily symptoms. Response prevention is an effective approach to eliminating excessive monitoring, checking, and reassurance seeking. Developing more adaptive strategies to help clients cope with physical symptoms is clearly of central importance in treating health anxiety. Helpful strategies include education about common physical symptoms and when seeking medical attention is appropriate, education about techniques to enhance the acceptance of symptoms, exposure to uncomfortable bodily symptoms, and relaxation techniques.

CHAPTER 8

# EXPOSURE

The role of avoidance in maintaining health anxiety and fear of death is a central one. We emphasize the importance of exposure to themes of illness and death and we tend to introduce exposure early in treatment (Furer, Walker, & Freeston, 2001). This may take the form of in vivo exposure to illness and death-related situations, interoceptive exposure to feared bodily symptoms, and imaginal exposure to symptoms and feared illnesses that are difficult to reproduce in real life.

## AVOIDANCE AND HEALTH ANXIETY

Chapter 3 outlines the role of avoidance in maintaining and increasing fears about illness and death. Identifying areas of avoidance is a critical component of treatment. Some clients are aware of which situations they avoid because of their health anxiety, while others may require more assistance in identifying avoidance behaviors (see Table 8.1 for a list of common areas of avoidance). Reviewing the client's level of discomfort and avoidance of medical settings, and illness- and death-related situations is important in determining goals for treatment. Clients may be uncertain whether they are avoiding a certain situation or activity because of anxiety or because they simply do not enjoy it (e.g., watching medical programs on television). In this circumstance, we encourage clients to engage in the activity a number of times until they find it boring. This way

**Table 8.1.** Common areas of avoidance in health anxiety

| | |
|---|---|
| Medical settings | • Having a medical procedure<br>• Attending medical appointments<br>• Having regular medical check-ups<br>• Monthly breast self-examination<br>• Visiting a friend in hospital<br>• Going to a specialty clinic, e.g. cancer clinic; palliative care unit<br>• Thinking about medial appointments, hospitals, etc.<br>• Visiting a medical setting associated with a difficult experience |
| Illness-related | • Watching or reading media stories about health issues<br>• Visiting health sites on the Internet<br>• Stories with a character who has a serious illness<br>• Talking to a friend or relative about health and illness<br>• Talking to a friend or relative who has a feared illness<br>• Thinking about illness-related situations |
| Death-related | • Stories with a character who is dying (TV, movies, reading, conversations)<br>• Thinking about death and dying<br>• Reading obituaries<br>• Writing a will<br>• Making funeral arrangements for self or others<br>• Attending a funeral<br>• Visiting a cemetery |
| Body symptoms | • Exercising and sports<br>• Experiencing intense heat<br>• Being in hot and stuffy places<br>• Thinking about body symptoms<br>• Eating certain foods (e.g., caffeine, spicy foods) |

the client and the therapist can ensure that the avoidance is not related to anxiety. The goal in overcoming avoidance is for clients to have the freedom to choose the activities they wish to engage in rather than letting anxiety determine these choices.

*Anthony: What is wrong with my heart?*

*Anthony is a 38-year-old married high school teacher. He has had problems with chest pain for the last five years. After he first discussed this with his family physician four years ago, Anthony was sent to a cardiologist and was given a full cardiac work-up. All test results came back negative. In the last few years, Anthony has gone to the hospital emergency department six times when his pains were severe. He has had numerous EKGs and is scheduled for his third treadmill stress test. Despite the reassurance from several physicians and from the tests, Anthony worries about heart disease whenever the chest pain hits. He finds*

*himself constantly worrying about his physical symptoms and is concerned that his problem has been misdiagnosed because he has not described his symptoms properly to the doctors. A year prior to attending our clinic, one of Anthony's close friends was diagnosed with angina and put on medication. Despite being very concerned about this friend, Anthony has avoided seeing him. When he does see him, he does not talk about the heart disease. He is terrified that his friend might describe symptoms similar to his own. Anthony also never discusses his fears about his health with friends or family for fear of being told of other people who have been misdiagnosed or died of heart attacks. When he hears stories about heart disease on the news, he always turns off the program immediately. He avoids reading the obituaries in the newspaper so he will not read about anyone dying of a heart attack (with a request for charitable donations to the Heart Foundation). Anthony is exercising less although he is very aware that exercise is very important for heart health. He fears that he will be like the ultra-healthy marathon runner who dies unexpectedly from undiagnosed heart disease.*

*Anthony's health anxiety resulted in social isolation and avoidance of health-maintaining behaviors. As is typical, this avoidance gradually spread over time and impeded his life more and more. He came for treatment because he wanted to be able to exercise again without becoming terribly anxious.*

## EXPOSURE

There is little research evaluating the specific contribution of exposure to treatment effectiveness with health anxiety, but many of the treatment packages that have demonstrated effectiveness with this population incorporate exposure (e.g., Bouman & Visser, 1998; Clark et al., 1998; Potts et al., 1999; Visser & Bouman, 1992, 2001; Warwick et al., 1996). Exposure is widely used in the treatment of the various anxiety disorders and has been demonstrated to be a critical treatment component. Griest, Marks, Berlin, Gournay, and Noshirvani (1980), for example, describe an interesting study looking at the impact of telling clients *not* to expose themselves to feared situations. The 17 participants (5 with agoraphobia, 2 with social phobia, 4 with obsessive-compulsive disorder, and 6 with specific phobias) were given two sets of instructions in counter-balanced order. For one week they were told to engage in regular exposure to feared stimuli and for the other week they were instructed to avoid feared stimuli as much as possible. Results clearly indicated that the exposure treatment was beneficial and that when individuals were in the avoidance condition, their presenting problems worsened. Telch, Agras, Taylor, Roth, and Gallen (1985) reported similar findings in a randomized trial of imipramine plus exposure compared to imipramine with avoidance instructions for treatment of

agoraphobia. The authors reported that the individuals in the exposure (plus imipramine) condition did well, whereas those in the avoidance condition showed no improvement at all, despite the imipramine.

## Exposure and Health Anxiety

Exposure to illness and death-related fears may be conducted in vivo or in imagination, and involves repeatedly facing situations, symptoms, and worries that cause anxiety and discomfort until the symptoms of anxiety decrease. Generally, repeated practice is required before the individual is able to face difficult situations with relative ease. Our clinical experience suggests that initiating exposure early in treatment of health anxiety may be particularly beneficial. Most individuals prefer a graduated exposure strategy, with early tasks being ones that create only modest anxiety and then gradually increasing the difficulty of the practice exercises. Initially, practice is focused on two to four situations. We encourage clients to select targets that are important and relevant to them. If a goal for exposure seems too complex or too difficult to tackle all at once, the goal can be broken down into smaller steps. We emphasize the importance of repeated practice of each exposure task. It is important for the client to experience early successes and mastery in anxiety-arousing situations. Starting with easier assignments will allow the individual to build self-confidence and confidence in the exposure technique. This facilitates later work on more challenging situations.

## Exposure to External Triggers

External triggers for health anxiety are often easiest for the client and the clinician to identify. Many of these situations can be tackled through in vivo exposure such as watching medical documentaries or dramas on television, reading accounts of people who are seriously ill, visiting health care facilities, and going for regular check-ups. Some external trigger situations may be associated with difficult memories, such as the hospital where the client received a painful treatment, or the place where a family member died. Exposure to these situations is often emotionally difficult but may help clients progress to the point where they can calmly visit a place associated with sad memories. We point out that all of us will have to visit friends and family in medical facilities and even use them ourselves at times. Using exposure so that we can visit these places without excessive distress has great advantages for future functioning. Handout 8.1 provides information for clients about in vivo exposure to external triggers. This handout also describes details about Anthony's treatment to illustrate how to break large goals down into smaller steps.

**Handout 8.1.** Facing your fears: Exposure to external triggers.

Another term for **facing your fears** is **exposure**. This simply means that you are exposing yourself to a situation that causes some anxiety or discomfort for you until your symptoms of anxiety subside. Exposure takes repeated practice before you will be able to face difficult situations with relative ease.

Pick three or four situations that you currently avoid and would like to be able to handle more effectively. Start with goals that are important to you. Also, you may want to select goals that make you only moderately anxious to start with and gradually work your way up to facing the more difficult situations. Make a list of the specific goals you want to work on:

1. _____
2. _____
3. _____
4. _____

You may have chosen some goals that you can start to practice right away, just as they are. Other goals may seem too difficult or too large to tackle right now. When that happens, you need to break the goal down into smaller and more manageable steps to work on. Read the example below to get some ideas about how to break down large goals into manageable steps.

*Anthony is a 38-year-old high school teacher who has had problems with chest pain for the last five years. He experiences a great deal of worry about heart disease and fears that he will die suddenly of a heart attack. He has had numerous cardiac tests and all have come back normal. His doctor has informed him that the problem with chest pain is related to stress and anxiety. Anthony identified three principal areas of avoidance (a) talking about heart disease, especially with his friend who has angina; (b) watching TV programs and reading information about heart disease; and (c) exercise. Anthony chose to first tackle the goal of returning to a regular exercise routine. Anthony had always been fit and he used to jog regularly several times per week and go to the gym twice a week to lift weights. As his worries about his chest pain increased, he had gradually stopped these activities. Anthony's goal of returning to regular exercise was broken down into the following steps:*

1. *Walk in the neighborhood for 20 minutes at a moderate pace at least three times per week*
2. *Same as #1 but brisk walking*
3. *Ride stationary bike at home at moderate pace for 10–15 minutes twice per week in addition to #2*
4. *Intersperse brisk walking with brief periods of light jogging; increase RPMs on stationary bike*
5. *Meet with personal trainer at gym to review weight lifting techniques and fitness regimen.*

*As he worked through these steps, Anthony was feeling more confident of his ability to exercise without being overwhelmed with anxiety about chest pain. He developed an exercise routine with the staff at his gym that involved jogging, weights, and sessions on the elliptical trainer. Anthony still experienced some chest pain and panicked at times when he felt short of breath while exercising. He learned to stay in the exercise situation to allow*

*the symptoms to settle, rather than halting his exercise session. Because of this, he progressed through the first three steps towards his exposure goal quite slowly, spending several weeks on each one. The turning point for Anthony seemed to be when he was able to attempt brief runs. Being able to jog again helped him feel in control of his health and well-being and spurred him on to get back to the gym.*

*Anthony also worked on breaking down his two goals of being able to talk about cardiac symptoms and being able to hear stories on the media about heart disease. A combined list of steps seemed most appropriate for these two goals, as it seemed that there was substantial overlap between the two. Anthony's list of steps included:*

1. *Reading a pamphlet about heart disease provided by his family doctor, which was brief and factual and very calm in tone*
2. *Reading more detailed information about heart disease provided by the Heart Foundation*
3. *Reading newspaper articles about Sudden Acute Respiratory Syndrome (SARS), which was an issue at that time*
4. *Watching TV coverage of the SARS virus*
5. *Talking to his sister (a very calm person) about the media coverage of the SARS virus*
6. *Making casual conversation about SARS with colleagues at work*
7. *Asking his friend if he had any brief pamphlets about angina that he had found useful*
8. *Reading the angina information provided by the friend*
9. *Discussing the angina pamphlet with the friend*
10. *Seeking out health articles in newspapers and magazines*
11. *Reading the obituaries in the newspaper*
12. *Seeking out the obituaries that make reference to heart disease.*

*Anthony's exposure list incorporated current events of the time, especially the SARS virus. Anthony was only moderately anxious about this virus so it served as an excellent exposure situation. News coverage of this virus was extensive, and it was a good opportunity to learn ways of coping with medical information in the media and in the community. Anthony also sought out his sister, a very calm individual, to discuss health issues, before having similar conversations with friends and colleagues.*

For the process of exposure to work in reducing your anxiety, several things are required. The exposure must be long enough to give your body a chance to desensitize to the situation. It is normal to feel anxiety during exposure practice. It is best to remain in the situation until the anxiety is past its peak and anxiety symptoms are subsiding. The exposure practice must take place repeatedly over days and weeks until the anxiety is reduced to a large degree. When the anxiety to the first situation has been reduced considerably, it is helpful to practice exposure to other feared situations in the same way, by using other practice assignments.

For fears that involve real-life situations (such as a fear of watching medical news or stories, a fear of attending funerals, or a fear of visiting hospitals), it is also very important to face these fears in real-life, not just in imagination. You should make plans to face any real life situations you fear or avoid as part of your ongoing homework in the program.

When it is inconvenient or impossible to practice in vivo exposure, or when an easier step is required before real-life exposure, imaginal exposure can be used to face the feared situation. For example, a person can use recollections of visits to a parent in palliative care to create written or audiotaped imaginal exposure scenarios.

## Exposure to Thoughts and Images Related to Illness

Thoughts and images concerning illness are common triggers for health anxiety. A person may notice a symptom (e.g., back pain) and may then be upset by the thought, "What if I have bone cancer?" The initial thought is often followed by thoughts and images of the suffering and disability that may accompany cancer, unpleasant treatments, and finally death. A very effective strategy is to have individuals develop detailed narratives, or *illness stories,* about their worst fears related to illness and death. We provide examples to show the client how to write a vivid and detailed account describing the troubling symptoms, the worries and doubts associated with the symptom, and the feared catastrophic results. During imaginal exposure the client repeatedly reads the story and uses it as a cue to vividly imagine the experiences. We explain that it is not the activity of reading that produces the exposure experience, but, rather, the use of the story to stimulate the imagination. In some cases, imaginal exposure initially triggers unpleasant physical symptoms (e.g., nausea or tightness in the chest) and this is helpful as a form of interoceptive exposure.

Exposure can be conducted in a graduated fashion with the illness stories becoming more anxiety provoking and having more difficult endings (e.g., painful death) as the client progresses through the exposure. If, for example, an individual has a modest fear of multiple sclerosis (MS) and an intense fear of Alzheimer's disease, they might begin with creating a narrative about MS and later on developing one for Alzheimer's disease. Similarly, early in treatment, a client's cancer story might end with the challenges of going through chemotherapy and a later story would likely involve the challenges of facing death. The client and the therapist together determine the best pace for this exposure.

When first presented with this treatment strategy of exposure to their illness fears, some clients, and some therapists for that matter, may respond with surprise or alarm. We have found that the way in which this technique is presented is very important for its acceptance and success. Handout 8.2 describes this exposure strategy for clients.

**Handout 8.2.** Creating an illness story.

One of the most powerful ways of overcoming anxiety is to directly face what you fear. The more that a person faces even difficult fears, the more the anxiety about them is reduced. Facing your fears in a planned way may also help to increase your confidence that you will be able to handle other fears.

It is helpful to apply this approach to fears of illness and death. The goal is not to be happy about these sad events. Rather, the goal is to face the reality of illness and death as a part of life calmly and without excessive anxiety.

You may say to yourself that you are already facing your fears by worrying about illness. However, worry tends to come to us at times and in ways over which we feel little control. When people are worrying about illness, they may do things to try get rid of the worry or to reassure themselves. Often, after worrying for a while, they will try to do something to "get the worry out of their mind" or to escape from their fear.

The approach of facing your fears directly is different. It involves regularly scheduling time to face your worry. You learn to take control of your worrying, rather than having the worry come at times that you do not control. Rather than struggling to reassure yourself that the terrible things you fear won't happen, you face the reality that these things can and do happen. You accept the thoughts of illness and death, rather than fighting them. With repeated practice in facing fears, it is normal for the anxiety to decline and for you to face even unpleasant possibilities more calmly.

One way that has been developed to face fears of illness and death is to write a story that includes the most important things you fear. You can then practice facing your fears by repeatedly reviewing the story and imagining that it is really happening to you.

On the following pages you will find several stories from people who have been using this approach to face their illness worries. Read over their stories carefully in preparation for creating your own story.

### A. Worries about Cancer

I notice that feeling of discomfort and bloating in my abdomen. I can also feel the pain that has been worrying me. I feel very stressed about this. I wonder if this could be an early sign of cancer. I have had some check-ups and tests but maybe this has been missed, the early signs. Cancer is something that can happen at my age. People can have very few symptoms and then suddenly it is there, and then a few months later they are gone. I feel so scared and worried about this.

If I have cancer, what will happen? How will I cope? Will I be able to go through all the tests and treatments that are necessary? Will I feel mutilated after the surgery? How will my family cope? How will the children do if their mother is gone? I find it so difficult to cope with these fears. My stomach feels sick just thinking about it.

What if the cancer treatments do not help? What if they make me very sick but before long the cancer comes back anyway? First I have surgery, then the

radiation treatment, and then chemotherapy. It takes me a long time to feel better afterward. How will I cope with the worry and the fear? And after going through all that, what if the symptoms come back before long? At that point I will know I am going to die. I do not know if I can face all the things that lead up to dying. Will the pain and sickness be more than I can handle? Can I cope with actually knowing that I am dying? I will be so scared about going through that.

As I get closer to dying, I will feel so guilty that I did not do more to prevent myself from getting cancer. There is more that I could have done to prevent it, but I didn't do those things. I just focus on all these worries. I feel so full of uncertainty and doubt about what will happen in the future. I feel so worried about my health.

### B. Worries about Heart Disease

I can feel that pain in my chest that I have felt before. It feels like a tight band with some sharp pains from time to time. It also feels like the pain is going into my arm and I can feel some tingling in my arm as well. What if this is the start of a heart attack? Should I go to the emergency department before it is too late? If I delay, will I collapse and be unable to call for help? If it gets worse, will I have to call an ambulance? What if they do not get here in time to help me?

I have seen the doctor about this chest pain before. She said it was related to stress and muscle tension. What if this time it is an early sign of heart disease? If I do not do anything, my heart may be damaged beyond repair. I may collapse and die before anyone can help me. They say getting medical attention early is very important and if I don't do anything, I may miss out on the chance to be helped.

I can see myself collapsing and lying on the floor. The pain is much worse now and it feels like my heart is being squeezed in a vise. Someone comes over to help me but I have so much pain and I am so weak that I cannot say a word. They are frantically calling for an ambulance for me. It seems like it takes forever for the ambulance to come. I wait and I wait and the pain gets worse and worse. Finally the ambulance attendants arrive and they are working on me. They listen to my heartbeat and they put on wires to get a better reading of my heartbeat. I can hear them saying: "This one has had a very bad heart attack. I do not know if he is going to make it." They are pumping on my chest. I feel terrified. I think I am dying. I wish I had had a chance to say goodbye to my family and friends. I will never have a chance to do that now. I hear them saying "We cannot stabilize him." Things are getting worse and the pain is feeling even worse. I am struggling to breathe.

I come back to the present for a minute. As I think about the possibility of having a heart attack or heart disease, the pain seems to become stronger. I feel so worried about having a heart attack and dying.

### C. Worries about Neurological Disease

I notice a twitching by my eye. I have felt this twitching often before. Why is this back again? I am feeling very worried. What if it is a neuromuscular disorder? What if this is the first step towards a gradual deterioration of my

muscles? It could start with this twitching and then spread tingling, twitching, and weakness in other muscles. In the end, I would lose more and more muscle control. What if I end up in a wheelchair? What if I were unable to do simple things like feeding and dressing myself?

If this is a neuromuscular disorder, it could eventually cause my death. How would my family cope without me? It would be so sad to die before my children have grown up. It would be so sad to see them grow up without a mother.

I think of the twitching again. Could this be a sign of a brain tumor, some type of brain cancer? I have had pains in the head before. What if I am missing the symptoms? What if there is something the doctors could have done to save me but everyone misses it? What if it is a terminal disease that no one catches until it is too late? I am so worried about my health, so worried about dying.

These diseases can happen at my age. People can have very few symptoms and then suddenly it is there, and then a few months later they are gone. Other people go on for years of suffering and are able to do very little to help themselves and very little to enjoy life. I focus on all these worries. I feel as if I am filled with uncertainty and doubt about what will happen in the future. I am so worried about my health.

## Writing Your Own Story

Now that you have read these sample stories, it is time to create your own story. Focus on one feared illness or problem at a time. In writing your story, several things can help to make it more effective for you:

1. Remember that you are writing the story for yourself – do not worry about the spelling or grammar. The most important thing is to make it as real and strongly emotional as possible *for you*.
2. *Write your story in the present or future tense, not in the past tense*.
3. Use words like "I," "my," and "me" (the first person) to make the story more real for you.
4. Describe the bodily feelings, possible signs of illness that have troubled you, or the thoughts that start the pattern of worry for you.
5. Describe in vivid terms the illness you worry about the most. Talk about the stages of the illness and your worries at each point along the way.
6. Describe the worries and doubts you experience regularly as you write the story.
7. Describe some of the catastrophic results you worry about: being extremely sick, being helpless, dying.
8. Describe any worries you have about other people who are close to you such as family or friends.
9. Try to write at least one page for each story, but feel free to make it longer.

## Using Illness Stories for Exposure

Once you have written your illness story, it is time to use it to face your fears of illness. The technical name for this approach is *imaginal exposure*. You will be

using your imagination to help you to face your fears. Over the years this has been found to be a powerful approach in helping people to overcome anxiety and worry. Exposure in imagination is especially helpful in facing fears that have not actually happened, that do not happen often in the course of a person's life, or that may never happen. You can work on this type of exposure any time during the day when you can free up some time to concentrate without interruptions. It is usually best not to plan this activity just before bedtime, because it may be difficult to shift your attention away from illness worries just before going to bed.

While you are facing your fears (exposure) it is normal for your anxiety to increase. In fact, feeling anxiety while you are facing your fears is a normal part of the process of overcoming fear. Remember, the goal is to face your fears and to cope with the anxiety experience. The anxiety will gradually subside with repeated practice in facing your fears.

Over the next week, we would recommend that you practice imaginal exposure to your illness fears for at least 30 minutes each day. Facing your illness worries in imagination can be done either by reading the story or by recording it on an audiotape and listening to it. Whichever approach you use, review the story repeatedly and use it to help you imagine vividly the situations you worry about. Try to imagine your feelings and actions if the illness and other unpleasant events were really happening to you. Try not to reassure yourself that the illness and the feared events will not occur.

Keep track of your practice and rate your anxiety early in the exposure session and at the end of the session. As you continue to practice, the anxiety ratings are likely to start at a high level initially and then gradually subside over the course of each practice session. Do not worry if your anxiety level does not drop very fast at first because it takes a while for the exposure process to have its impact.

When you find that you can imagine your story with only moderate levels of anxiety, write a new story that contains other fears and that produces a higher level of anxiety again. Some of your stories may involve illness and death of people who are close to you. For each story, practice repeatedly until the anxiety level you experience is reduced considerably.

Clients are often surprised by how quickly anxiety reduction occurs. For many individuals, writing the narrative is the most difficult and anxiety-producing part of the exposure. A few readings of the illness story often produce substantial reduction in anxiety ratings. For some clients, lengthier exposure to the illness stories is necessary to obtain significant anxiety reduction.

## Exposure to Feared Bodily Sensations

For many individuals, bodily sensations trigger health anxiety. As discussed in Chapter 3, when individuals are concerned about their health, they tend to focus on body symptoms and may detect even small changes in bodily functioning. Common triggers for anxiety include symptoms such as pain, dizziness, difficulty in breathing, changes in heart rate, lumps, and rashes. Some clients avoid activities or environments that may trigger uncomfortable physical sensations. Table 8.1 lists some common areas of avoidance related to bodily symptoms.

Exposure to bodily sensations can be accomplished in several ways, including engaging in activities that produce the uncomfortable symptom, focusing on the symptom when it is present, interoceptive exposure, and imaginal exposure to feared sensations or symptoms. The first strategy is perhaps the most obvious one: have the client engage repeatedly in an activity that has been avoided because it creates uncomfortable sensations. If a person is avoiding walking outside during the hot summer because the feeling of being too hot makes him uncomfortable, a homework assignment could be to go for daily walks outdoors (with a water bottle). Similarly, if a person has stopped going to dances because she feels uncomfortable when her heart pounds and she feels breathless, the obvious prescription is to go to dances every Saturday and dance energetically. A related approach is to watch for the bodily sensations to occur in everyday life (e.g., pain) and then focus on the sensation to see if it can be made more intense and if attention can be focused on the symptom for a significant time (30 minutes perhaps). The goal is not to focus on the unpleasant symptom for hours at a time, but rather to have repeated periods of exposure where the client focuses on the symptom rather than trying to focus attention elsewhere, in order to allow for extinction of the emotional response to the bodily sensation.

*Anthony: What is wrong with my heart?*

*This strategy was incorporated into the exposure tasks selected for Anthony. As noted earlier, he avoided exercise, in part because he found the resulting shortness of breath to be very uncomfortable. Brisk walking, jogging, and other aerobic*

*exercise provided Anthony with regular exposure to this distressing body symptom and eventually allowed him to experience shortness of breath without worrying about it.*

A second strategy for exposure to bodily sensations is interoceptive exposure, which has been used very effectively in the treatment of panic disorder (Craske & Barlow, 2001; Schmidt et al., 2000). This strategy involves deliberately producing the feared bodily sensations, focusing attention on them without trying to bring them to an end, and trying to maintain the sensations for a number of minutes as part of exposure practice. Common strategies for producing uncomfortable bodily sensations are outlined in Table 8.2. Many clients find this to be an intimidating exercise and they are more likely to use these techniques at home if they are first experienced in a therapy session. As with all exposure techniques, it is critical that interoceptive exposure be repeated until the individual is no longer distressed by the bodily sensation. We remind clients that they will experience anxiety at first when they engage in these activities but, as they continue to practice, their ability to face more intense bodily sensations and to cope with feelings of fear and discomfort will increase.

**Table 8.2.** Interoceptive exposure

| Bodily sensations | Strategy for producing symptom |
|---|---|
| Heart racing or pounding | • Aerobic exercise (jogging, climbing stairs, etc.) |
| Shortness of breath | • Aerobic exercise<br>• Hold breath for 30 s<br>• Hyperventilation for 1-2 min |
| Dizziness/lightheadedness | • Crouch/sit with head lowered for 30 s. Rise rapidly to a standing position<br>• Spin around for 1 min<br>• Hyperventilation for 1-2 min<br>• Move head rapidly from side to side |
| Feeling jittery or wound up | • Watch suspense or horror movie<br>• Consume extra caffeine |
| Feeling sweaty or too hot | • Sauna or hot tub<br>• Hot shower or bath with bathroom door closed<br>• Wear clothing that is too warm |
| Stomach discomfort/nausea | • Focus on your stomach and imagine a time in the past when you felt very nauseated<br>• Imagine eating or seeing something (e.g., another person vomiting) that makes you feel nauseated<br>• Imagine the smell of vomit |

Some of the body symptoms that trigger health worries may be difficult or impossible to produce voluntarily (e.g., lumps, skin rashes, headaches, and abdominal pains). Imaginal exposure is very useful here. We have clients write narratives about their feared bodily symptoms using the same approach as for the illness stories. The client describes in vivid terms the feared symptom, the worries and doubts associated with this symptom, and the feared catastrophic results. The imaginal exposure involves reading the story repeatedly to stimulate imagery of the situation for 30 min or more. The exposure practice must be done repeatedly over days and weeks until the anxiety is reduced substantially. An example which may be used with clients is provided in Handout 8.3.

### Exposure and Response Prevention

It is important to ensure that clients continue to employ response prevention strategies (see Chapter 7) when they engage in exposure. Particularly when facing challenging situations, the individual may be tempted to check bodily symptoms more frequently and to seek reassurance from others. It is important to remember that although checking and reassurance seeking may reduce anxiety in the short term, in the long term these behaviors feed the health anxiety cycle.

### Exposure and Safety Signals

Reducing reliance on safety signals is also an important component of exposure. Clients may need to work on practicing exposure to health-related situations without carrying their medication, water bottle, cell phone or other anxiety-reducing device. It is important for the clinician to review the use of safety behaviors occasionally through the course of treatment and to help the client gradually eliminate the use of excessive safety behaviors. As is the case with checking and reassurance seeking, it is important to establish what is realistic and appropriate (e.g., having a first aid kit in the home and car) and what is not (e.g., staying within a certain distance of a hospital or doctor's office).

**Handout 8.3.** Sample body symptom story.

***Cynthia's Body Symptom Story: Back Pain***

*This back pain has been with me for over a year. Why doesn't it go away?? I always thought that it would go away on its own after menopause. Physiotherapy sometimes makes it feel better, but the pain, the pinching, the spasms always come back. I don't think my doctor knows what to do about back pain like this. He probably thinks it's all in my head.*

*When I go to physiotherapy it hurts. The next day is really painful. It sometimes even hurts when I take a breath. I get a lot of spasms and I cry a lot. I just wish it would go away!!*

*The back pain is getting progressively worse. Will I be disabled?? I am really scared and the thoughts run like wildfire. My heart is pounding and I can feel the sweat running down my back. I'm starting to have a hard time going to work because of the pain. I can't concentrate on anything anymore. My arms get very weak and my hands have a hard time clutching things. Why is it getting so bad? I thought this pain was supposed to go away. Now I can never find a comfortable position to be in. My legs are starting to bother me. It hurts when I walk. It hurts when I sit. My back feels very stiff. I can only sleep for a bit at a time because I get so sore.*

*The physiotherapist tells me he has done all he can. He cannot help me anymore. Now what will I do? I take a lot of pain medication. I hate taking medication but I have to I keep thinking I might be in a wheelchair soon. I have to quit the job I really love because I can't deal with this constant pain.*

*I just sit around most of the time now and it really hurts all the time. I need help to do chores – even to go to the washroom. Someone comes in to make meals. I feel so helpless and hopeless. What will become of me??*

*Today someone brought me a wheelchair. I can't get around anymore. This is very hard. How will I manage my home? And my cottage? My beloved cottage where I like to take walks, play in the garden, or just sit by the lake and read a book. Why did this have to happen to me??*

## CONCLUSION

For many clients, avoidance is a core feature of their health anxiety. Exposure to bodily symptoms and themes of illness and death is, therefore, critical for treatment success. In vivo, imaginal, and interoceptive exposure can all be helpful techniques, depending on the nature of the avoided stimuli. We encourage gradual and repeated exposure to feared health-related situations. Our experience has been that introducing these strategies early in treatment can result in substantial reductions of avoidance and anxiety.

CHAPTER 9

# COGNITIVE INTERVENTIONS

Cognitive-behavioral models of health anxiety all incorporate cognitive components. The hypochondriasis model proposed by Paul Salkovskis and his Oxford colleagues (Salkovskis & Warwick, 1986, 2001; Warwick & Salkovskis, 1990), for example, emphasizes the importance of maladaptive beliefs relating to illness, misinterpretations of bodily symptoms or health information, and the tendency for individuals to selectively focus on information confirming their health fears. You may recall the following case example from Chapter 3:

*Jim: What if I have a brain tumor?*

*Whenever Jim gets painful headaches, which happens frequently, he worries that these headaches are a sign that he has a brain tumor or an aneurysm. His anxious thoughts include: "I've heard that people with brain tumors usually start off with terrible headaches that they dismiss as nothing serious. Then they end up dying terrible deaths! I better go to the doctor right away." Needless to say, these frightening thoughts feed Jim's anxiety.*

As discussed in Chapter 4, both behavioral and cognitive treatments for hypochondriasis and somatization appear to be effective, as are the treatments that incorporate both approaches. Since we have no information suggesting that one or the other approach might be particularly suitable in a given situation or with a given client, the clinical implication is that there is some flexibility in application of the CBT approach. The degree to which

specific treatment components are emphasized may depend on the preferences of the client, the preferences of the clinician, and the most salient aspects of the problem as identified in the case formulation.

## COGNITIVE REAPPRAISAL

### Identifying Problematic Thoughts

We begin the process of cognitive reappraisal by having clients monitor their problematic beliefs and worries related to somatic symptoms and illness. Using a thought diary, we have clients record their anxious thoughts, and the situations in which they occur, for several days (see Handout 9.1). We also find it helpful to have clients use the CBT model (see Chapter 3, Handout 3.1) as a way of identifying their thought patterns and the role these thoughts play in increasing health anxiety. Some clients are easily able to identify and track their thoughts and they generate an extensive list of troubling thoughts that reflect their concerns related to physical symptoms or fears about disease. Others may have more difficulty with this task and may benefit from prompts to track particular types of thoughts or beliefs identified in the initial assessment. For example, the client may be prompted to note all instances of thoughts related to headaches or thoughts related to fears of stomach cancer. The purpose of this period of self-monitoring is three-fold (a) it helps the individual become more aware of anxiety-producing thoughts as they occur; (b) it allows the client and the clinician to identify triggers for negative thoughts; and (c) it assists the client and the clinician in identifying patterns of health beliefs that can be targeted in treatment.

*Jim: What if I have a brain tumor?*

*Jim monitored his anxious thoughts about his headaches for a one-week period. Together, Jim and the clinician examined his thought diaries and identified the following principal health beliefs:*

- *Headaches are serious symptoms that should not be ignored.*
- *Healthy people do not have bad headaches.*
- *If I do nothing about these headaches and it turns out that I do have a brain tumor or an aneurysm, it will be my fault if I die.*
- *I cannot cope with life if these headaches continue.*

### Reappraisal Strategies

Various components of cognitive reappraisal may be emphasized to varying degrees, depending on the individual's presentation. Salkovskis,

**Handout 9.1.** Thought diary.

| Date & time | Situation | Anxiety (0–10) | Anxious thoughts | Challenges or coping thoughts |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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| | | | | |
| | | | | |
| | | | | |

***SCALE FOR RATING INTENSITY OF ANXIETY***

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|

| None | Mild | Moderate | Severe | Very severe |
|---|---|---|---|---|
| Relaxed, no discomfort | Not quite relaxed, just noticeable discomfort | Definite discomfort, but managing it | Extremely uncomfortable; feel it becoming unmanageable | Worst I have ever felt-overwhelming |

Warwick, and Deale (2003) identify one of the first tasks of the clinician as helping clients recognize that "their problems are better accounted for by the fear of cancer and their self-sustaining reactions to this fear, rather than actually having cancer" (p. 356). This is a very important issue. We find it helpful to discuss the impact of the anxiety on the individual's daily life and enjoyment of life. We also emphasize that patterns of worry about health can be changed with hard work. We generally take a neutral position as to whether clients have or will get the diseases they fear.

Most people have very limited information on the probability of the illnesses they fear. Many clinicians use probability estimates to reassure clients that their worst fears are unlikely to come true. For example, a 20-year-old who is certain she will die of breast cancer in the next six months (without having a cancer diagnosis) may benefit from information about the rarity of this disease in young adults. The difficulty with probability estimates, however, is that they can never be reduced to zero (i.e., although extremely uncommon, breast cancer can occur in 20-year-olds). Some clients indicate that even a 1 in 10,000 chance is too much to tolerate.

Another cognitive reappraisal strategy involves helping the client learn about other potential explanations for the physical symptoms that trigger worry (as described in Chapter 7). Broadening explanations to include noncatastrophic possibilities such as anxiety, tension, fatigue, and flu can be very helpful in reducing the focus on catastrophic causes for the symptoms (i.e., serious or terminal illness). The client thus learns to consider the possibility that the lump on her neck may be a lymph node enlarged due to a cold or other mild virus, or some nonspecific factor, rather than being a certain indicator of a tumor. Similarly, the client who fears that his headaches are a sure sign of brain cancer learns to consider the possibility that his headaches are due to lack of rest, dehydration, and muscular tension.

It is also important to discuss how the person can cope with bothersome physical symptoms. Part of the client's response to bodily sensations (e.g., abdominal discomfort, skin rash) can involve active coping strategies. The individual with abdominal discomfort may consider coping strategies such as using a heating pad, going for a walk, or increasing the fiber in their diet to facilitate bowel movements. The client with a skin rash may consider using a mild topical ointment to relieve itching, engaging in a pleasurable and distracting activity, and reminding themselves that if the rash does not diminish in two to three weeks, they can have their family physician look at it. Cognitive strategies can, therefore, include mental rehearsal of noncatastrophic responses to cope with bodily symptoms.

We have found it very productive to emphasize the importance of learning to *tolerate uncertainty*. Using this approach, the clinician does not need to minimize the possibility that clients' physical symptoms may reflect serious disease. We acknowledge the possibility that the clients have or will get the illnesses they fear and we assist them in coping with this uncertainty. It is important for clients to recognize that all of us will have to face illness at various times in our lives and, of course that all of us will die. The clinician can point out that we do not know *which* specific challenges we will have to face or *when* we will die, so it is important to live life to the fullest until the time comes when we have to cope with illness and death. Emphasizing that people are generally able to cope with these challenges with dignity, and that anxiety about illness and death is a normal part of the coping process, is also important. Handout 9.2 provides specific questions to guide the cognitive reappraisal process.

### Developing Realistic Health Beliefs

The cognitive reappraisal efforts will allow the client to work on modifying thoughts related to health anxiety. Many clients find that there are repetitive themes to their thought patterns. Common concerns reported by clients with health anxiety include beliefs that all symptoms have a specific explanation that healthy people have no symptoms, and that illness is very threatening. Handout 9.3 provides more realistic beliefs that our clients have developed and found useful in managing their anxiety.

## ACCEPTANCE

When people are attempting to cope with difficulties with somatic symptoms or health anxiety, much of their energy may be spent trying to avoid or escape from unpleasant bodily sensations, feelings, memories, or thoughts that arise in everyday life (experiential avoidance). This is understandable, given the discomfort and pain caused by these experiences. Unfortunately, the attempts to escape or avoid are often unsuccessful and some of the behaviors involved may make the problem worse. Acceptance is another approach to the problem of avoidance that complements the cognitive reappraisal strategies described earlier and the exposure approach outlined in Chapter 6. While exposure is often carried out in a planned way, acceptance may be used in many everyday situations. An understanding of the importance of acceptance may help clients face future challenges without avoidance. Some clients ask how

**Handout 9.2.** Coping with negative and catastrophic thoughts.

You have been keeping a diary of your thoughts related to your symptoms and health, as well as your coping thoughts in dealing with your worries. Now we are going to work in more detail on the most common fearful thoughts you have about illness.

1. What are the most common upsetting thoughts you have about the symptoms or illness?
2. For each thought, note:

   - When does this thought tend to come to you? Do particular body symptoms trigger this thought? Is the thought related to a news report you have heard? Consider various triggers that may be related to this worry.
   - What is the probability this negative event will happen? If you have had this negative thought before, how often has the negative outcome happened in the past? For example, if you find yourself worrying about stomach cancer when you have stomach pains, think about how many times you have had stomach pains over the years (probably many times, perhaps hundreds of times) and the pains ended up going away on their own. How often does this negative event (e.g., stomach cancer) happen to other people of your age? Do not ask whether this negative event will happen in your lifetime (we are all likely to have serious illnesses in our lifetime). How likely is it that it will happen today? This year?
   - What other possible explanations are there for the troubling symptom? Think about all the other reasons why you might have this symptom: Could it be related to stress and tension? Your activity level? What you have been eating or drinking? Your sleep habits? Try to come up with several less frightening explanations for your symptom.
   - How can you cope with the uncomfortable symptom? What has helped in the past? What do others do when they have this symptom? What could you try this time?
   - If you did get a serious illness, how would you cope with it? Negative events happen to people throughout their lifetime, often not when they are worrying about them but at an unexpected time. Are there people around you who could support you and your family as you cope with a serious illness?
   - This negative or catastrophic thought will occur again in the future. What are some coping thoughts you could use when this thought happens again? Keep these handy so that you can refer to them if you experience the same worry (or a similar concern) again.

Use the worksheets on the next page to help you with this task. Read over Jim's example first and then write out several examples of your own.

### Jim's thinking patterns worksheet

**Negative or catastrophic thought about physical symptoms and/or illness:**
*These painful headaches are a sign that I have a brain tumor or aneurysm.*

**When does this thought tend to come to you? What seems to trigger this thought?**
*Whenever I have a headache that lasts longer than 20 minutes.*

**What is the probability that this negative event (e.g., serious illness) will happen?**
*All people, including healthy people, get headaches. I realize that brain tumors and aneurysms are pretty rare. I have had hundreds of headaches and have not ruptured an aneurysm yet. I have had these headaches for years, so if I really did have a brain tumor I would be sicker by now.*

**List other possible explanations for the troubling physical symptom.**
*Stress, tension, too much fatigue, not enough sleep, spending too much time working on the computer.*

**How can you cope with the uncomfortable bodily symptom? What has helped in the past? What can you try this time?**
*I usually feel better if I go for a walk in the fresh air, have a drink of water, and work on relaxing the muscles in my neck and shoulders. I will try these first and if the headache is still a problem, I will take a pain reliever.*

**If you did get a serious illness, how would you cope with it?**
*I hope I could cope with this with some dignity. I know my wife would help me get through the treatment. My friends and relatives would help me and my family to get through this too.*

**What are some coping thoughts you could use when this negative thought happens in the future?**
1. *My headaches are annoying but I generally feel better if I go for a walk in the fresh air, have a drink of water, and work on relaxing the muscles in my neck and shoulders. These strategies do not help brain tumors but they do help tension-related headaches, so my headaches are likely related to stress.*
2. *All people, including healthy people, have headaches. Most headaches are due to tension, too much caffeine, and other minor stressors.*
3. *If I am not able to manage these headaches with healthy strategies and they continue to be a problem for many weeks, I can talk to my doctor about it. She will let me know if I need to be concerned about this. If I do have a serious illness I will figure out a way to handle it.*

**Thinking patterns worksheet**

Negative or catastrophic thought about physical symptoms and/or illness:

_____

_____

When does this thought tend to come to you? What seems to trigger this thought?

_____

_____

_____

What is the probability that this negative event (e.g., serious illness) will happen?

_____

_____

_____

List other possible explanations for the troubling physical symptom.

_____

_____

_____

_____

How can you cope with the uncomfortable bodily symptom? What has helped in the past? What can you try this time?

_____

_____

_____

_____

If you did get a serious illness, how would you cope with it?

_____

_____

_____

What are some coping thoughts you could use when this negative thought happens in the future?

_____

_____

_____

_____

**Handout 9.3.** Challenging your beliefs.

| Unrealistic belief | More realistic belief |
|---|---|
| • I cannot go on with life until I have a clear diagnosis of the problem and a treatment that will remove the symptoms. | • Many people go on with life in spite of symptoms that do not have a clear diagnosis or treatment. Going on with life often improves symptoms and makes it easier to cope. |
| • Negative tests results are very threatening. They mean that the doctors do not understand the reason for my symptoms. The problem is even more dangerous because the doctors do not understand it. | • Negative test results are good news because they mean that the doctors have removed a number of very serious illnesses from the list of possible explanations for my symptoms. Most people having a test get negative results. |
| • I should rest and avoid vigorous activity in order to preserve my health. | • I can improve my health by staying as physically active as possible. Exercise can strengthen the body, increase flexibility, reduce stress, and reduce pain. |
| • Physical symptoms reflect disease. You are only in good health when you have no symptoms. | • Physical symptoms are a part of our normal and healthy bodily functioning. All people, including healthy people, have physical symptoms on a regular basis. |
| • If this doctor cannot fix my symptoms, then it is important that I keep searching for someone who can. | • Many physical symptoms are a part of life. I can put all my energy into going to lots of doctors to find someone to fix these symptoms or I can focus my energy on going on with my life. Being active and enjoying my life will make it easier to cope with the physical symptoms. |
| • If I am told that I have a serious, life-threatening disease, I would be unable to cope. | • People are generally able to cope with these challenges with dignity. I have family and friends who would support me and my loved ones if I get a serious, life-threatening disease. |
| • If I monitor my health very carefully, I will prevent serious disease. | • It is a good idea to go for a routine medical examination every year or two and to do the routine monitoring my doctor suggests (like doing breast self-exams once per month). I do not wish to spend my life in a CT scanner. I can put my energy into being physically active, eating a healthy diet, and enjoying my life. |

they should manage anxiety during exposure practice and acceptance is an effective approach that can be discussed explicitly rather than implied. Other clients may try to suppress or control anxiety during exposure to feared situations and this may be counterproductive. Clients who are not willing to use an imaginal exposure approach to very difficult themes (e.g., such as the feared death of a young child or painful experiences in the past) may be willing to apply an acceptance approach to spontaneous thoughts and memories about these situations.

## Acceptance of Physical Symptoms

Helping the client accept that physical symptoms are a normal part of a healthy person's experience may be an important goal in the treatment of health anxiety. The acceptance approach has been studied extensively in the area of pain management. Acceptance has been related to reports of lower pain intensity, disability, depression, and anxiety, and to higher functioning in everyday life (McCracken & Eccleston, 2003). Two studies that are especially interesting considered the effect of instructions focusing on acceptance versus control of unpleasant symptoms. Feldner, Zvolensky, Eifert, and Spira (2003) recruited 48 college students with high or low levels of emotional avoidance and used a biological challenge known to increase feelings of physiological arousal and anxiety (inhalation of 20% $CO_2$). Half were instructed to inhibit the challenge-induced emotional state (inhibit) and the other half were instructed to simply observe their emotional response (acceptance). The high and low emotional avoidance groups did not differ in their preratings of anxiety in the challenge situation but the high avoidance group had a higher heart rate in last 30 seconds of the baseline (anticipatory) period. The high avoidance group reported that they were less able to regulate their emotional response during the challenge procedure. The high emotional avoidance respondents reported greater levels of anxiety relative to the low emotional avoidance respondents if they received inhibit instructions but not when they received acceptance instructions. The heart rate response during the challenge indicated that those in the inhibit condition showed a decrease in heart rate, while those in the acceptance condition showed an increase in heart rate. The authors concluded that dispositional emotional avoidance was related to how bodily arousal is experienced rather than the actual or perceived physiological response. Instructions to inhibit emotional response were found to increase anxiety among those with high emotional avoidance.

Eifert and Heffner (2003) had 60 females with high levels of anxiety sensitivity participate in two, ten-minute periods of 10% $CO_2$ inhalation. Before each inhalation period, the women had a training procedure

encouraging them to either mindfully observe (acceptance instructions group) or control symptoms via diaphragmatic breathing (control instructions group). A third group was given no specific instructions. The three groups did not differ in their physiological response during the challenge, as assessed by increase in heart rate and skin conductance. Compared with the control instructions and no instructions groups, participants in the acceptance instructions group reported less intense fear and cognitive symptoms and fewer catastrophic thoughts during the $CO_2$ inhalation. The acceptance instruction group also had a shorter latency time to their decision to start the next inhalation trial than the control instruction group. Participants who received acceptance instructions were less likely to drop out of the study before completion than those in the control and no instruction groups, and were more likely to agree to return for another experimental session for course credits. The results for latency drop out, and agreement to return were judged to be indications of lower avoidance behavior in the acceptance group than the control instruction group.

While a great deal of research is required to further evaluate the impact of acceptance as a treatment component, this approach fits well with other treatment techniques used in the area (techniques designed to facilitate exposure and eliminate experiential avoidance), and we have found it helpful to include it in treatment. The description of acceptance provided in Handout 9.4 may be useful in explaining this approach to clients.

## Shifting Focus of Attention

A number of the models of health anxiety emphasize the role of excessive focus on bodily symptoms (Barsky, 2001b; Barsky & Wyshak, 1990) in the maintenance of health anxiety. Teaching the client to shift the focus of attention away from the worry or the symptom complements the acceptance approach. Handout 9.5 provides material for clients describing this approach.

**Handout 9.4.** Acceptance as a coping strategy.

Unpleasant, uncomfortable, and even painful experiences are a normal part of life. Here are just a few examples:

1. Pain is a common experience for all of us. As life goes on, most of us will experience occasional or chronic pain in some part of our body. Other uncomfortable bodily symptoms, such as muscle stiffness or tightness, numbness and tingling, dizziness, fatigue, and stomach discomfort, are all common sensations.
2. Anxiety and worry are emotions we experience when facing challenging situations. Common examples are upcoming medical procedures and concern about the health or well-being of family members and friends.
3. We all feel sadness about a loss or a disappointment in life.
4. Feeling guilty about a challenge we feel we have not handled well is a common experience.
5. Most of us have memories of unpleasant or painful experiences.
6. When we first have these experiences, they often tell us something about how our body is functioning or about important events in our life. If the experience continues to return over time, however, people often feel they cannot tolerate the experience and they must do something to avoid or escape it. Some people become very desperate in their attempts to avoid the unpleasant experience and the avoidance may cause more harm than good. Attempts to avoid and escape may take many forms including:

   - Desperately seeking treatment after treatment to try to eliminate the symptom. Often there are things that make the symptom worse or better, but there may not be anything that can eliminate it permanently.
   - Trying desperately to distract ourselves from the experience.
   - Using inappropriate methods such as excessive alcohol to try to numb the experience or memories of the experience.
   - Trying not to think about the experience.
   - Avoiding talking about the experience, even when it would be appropriate to talk about it.
   - Avoiding any reminders of the experience.

We know from research on anxiety and other painful experiences that avoidance often prevents us from coming to terms with and resolving a problem. Avoidance often makes it more difficult to cope with a problem over time. Some people do nothing to avoid the experience but, rather, devote a great deal of time to thinking about their frustration, anger, or despair about the experience. These forms of nonacceptance all have the impact of increasing the suffering that goes along with the experience. So:

Pain + Lack of Acceptance = Suffering
Anxiety + Lack of Acceptance = Suffering

The alternative to nonacceptance is to accept the reality of the experience and to choose to go on with life anyway. Acceptance does not mean that you like the

experience, that you want it to continue, that you see it as fair, or that you will do nothing about it. Rather, acceptance involves calmly understanding that the experience is part of your life, that it may continue for some time, and that it is best to get on with life in spite of the experience. Acceptance involves striving to face the experience with a sense of calm, rather than desperation or despair, and letting go of the struggle to avoid or eliminate the experience.

Your acceptance may not be 0% or 100% – it may fall at many places in between. Often you do not achieve acceptance in one moment – it is something that has to be worked at over time. Acceptance involves observing our sensations (pain, anxious arousal, tension), our emotions (anxiety, anger, sadness), our thoughts ("I can't stand this," "This person has to do things my way"), our memories (that hurt so much), and our behaviors (I am speaking with an angry voice), and recognizing them for what they are and how they relate to reality. A thought is a thought and it may not indicate how things always will be. An emotion is an emotion: something we feel at the moment and that will change over time. Here are some examples of just a few of the areas where you may benefit from using acceptance:

1. When you are facing difficult memories from the past, such as the loss of someone close, an upsetting experience, or a serious illness, you can observe your memory and your reactions to it and how your thoughts and emotions change over time. If you accept the memory without trying to push it away, you will be able to cope with it. As time passes, your attention will move to other experiences.
2. When you are facing feared situations, you can be aware of the body sensations and anxious emotions you experience and how they change over time. You can accept the feelings and not try to change them – they will change as time passes if you simply observe them.
3. When you are facing unpleasant symptoms, if you accept the symptoms and go ahead with your life while you manage the symptoms as effectively as you can, they often resolve more quickly than if you are desperate to eliminate them or feel a sense of despair about them. An attitude of acceptance and determination to get on with life in spite of the symptom will help you cope.
4. Another way to work on accepting a difficult symptom is to notice when it occurs and spend 15 or 20 minutes calmly observing it without trying to change the symptom or to distract yourself. Describe the symptom in as much detail as you can. Notice how it may change as the minutes go on – many symptoms increase and decrease in intensity over time. Notice what other reactions you have in your body as you observe the symptom. Do you notice tension or arousal or feelings of calmness? What thoughts and emotions do you notice? Do your thoughts relate to fear, worry, desperation, anger, or hopelessness? Or, are they calm? Observing your symptom without trying to change it may help you to be more accepting in your approach, especially when you do this once or twice each day over a couple of weeks.

These are just a few of the examples of how a calm and accepting attitude may help you to cope more effectively.

Here is an example of someone who was having difficulty accepting her problems with pain:

*Marsha: I can't stand this pain.*

*Marsha woke up one morning with back pain. She had experienced back pain often over the previous years and was very upset that it had returned. She felt she could not cope with this problem again and that she must do something to relieve the pain as soon as possible. Brief physiotherapy and exercise had helped the pain earlier but she felt frustrated and angry that it was back again after several pain-free months. She decided to go to a massage therapist for help. The massage helped but later the pain was even worse. She worried that her decision to have the deep-muscle massage had injured her back and felt very guilty. With a sense of desperation, she phoned the after-hours line of her doctor's office and spoke to the physician about the problem and what medication she could take. She wondered if she should go to a hospital emergency department.*

Clearly, Marsha had difficulty accepting her back pain and she felt she had to take some decisive action to end it. Unfortunately, the more she struggled with the pain, the more it upset her. In treatment, we discussed the importance of accepting her experience of back pain. She had coped successfully with back pain off and on for many years and had been very successful in her work and her family life in spite of this. When she was able to accept that back pain is a normal life experience that can be managed effectively, she was able to get back to methods that had been helpful in the past, including using pain medication for a few days and then following up with stretching and strengthening exercises. All of us will have many difficult experiences in life that can be managed more effectively with acceptance than with struggle or despair.

**Handout 9.5.** Focusing your attention away from symptoms.

An approach that is complementary to accepting symptoms is that of gradually focusing your attention on factors other than your symptoms. The processes involved in perceiving and thinking can only focus on a limited number of situations at one time. Focusing your attention on symptoms increases your perception of their intensity. Focusing on other important factors in your environment will often make symptoms feel less intense. Note that this is not the same as trying to ignore symptoms. Rather the goal is to acknowledge and accept symptoms and then to go on and focus on other more pressing aspects of life:

- *Refocusing*. Focusing your attention away from your symptoms and toward the external environment can help. For example, concentrate on the conversation you're involved in, rather than on the pain in your chest.
- *Coping thoughts*. These can help you both accept your symptoms and refocus your attention. Here is an example: "My chest is feeling really sore just now. Don't fight it. Just let it pass. Pay attention to the person you are talking to."

## Healthy and unhealthy distraction

When you are feeling worried about symptoms, distracting yourself (focusing your attention on something else) can help manage the anxiety. But distraction can be healthy or unhealthy, depending on how you use it. Here are some examples. You notice the headache you are worried about while you are in a meeting at work:

1. *Healthy distraction*. Rather than pay attention to the symptoms, you pay attention to what the other people are saying and take notes to help you follow up.
2. *Unhealthy distraction*. You start to daydream about the coming weekend and what you will be doing to relax. You miss a lot of the information discussed at the meeting.

You notice a pain in your back that you have really been frustrated about:

1. *Healthy distraction*. You accept the feelings of pain that you have experienced many times over recent months. You get back to working on a project you want to finish up today.
2. *Unhealthy distraction*. You decide to stop your work and watch television instead.

You have been worrying about an upcoming meeting with your child's principal and feel nauseated.

1. *Healthy distraction*. You get out a piece of paper and spend 15 minutes making notes covering the issues you would like to discuss. You then move on to the rest of your work for the day.
2. *Unhealthy distraction*. You arrange to meet some friends for dinner. One drink becomes five, and you arrive at the meeting with the principal the next day unprepared and with a hangover to boot.

You are at a movie with your partner and are bothered by symptoms that you worry about a lot.

1. *Healthy distraction*. You make a point of focusing on the dialogue in the movie and paying attention to the interesting cinematography.
2. *Unhealthy distraction*. You leave the movie early and wander about in the lobby waiting for your partner.

Healthy distraction often involves focusing on goals and activities that will be helpful to you in the long run. Unhealthy distraction may involve activities such as excessive work, alcohol use, watching television, or sleeping.

*Phil: Watching for symptoms*

*Phil was a management consultant assigned to work in the headquarters of a large client. He had been having difficulty with symptoms of nausea and abdominal discomfort. After a thorough review of his symptoms, his family doctor indicated that the problem was most likely due to the high degree of work stress he had been experiencing. His doctor suggested that the most effective approach would be to work on handling work stress more effectively. Phil agreed that the problem had become much more significant since the stress in his job had been much higher. He was very worried that if the symptoms got worse, he would not be effective in his work. He was also concerned that the abdominal symptoms might be a sign of a much more serious illness. Each morning when he got up, he focused on how his stomach was feeling that day. As he worked at the office, he frequently paused in his work to check how his stomach was feeling. When he noticed abdominal symptoms, he focused on them to see if they were getting worse. He would review what he had eaten that day and on the previous evening. He planned what he might have to eat later in the day that would be easier on his stomach.*

*As he started to work on refocusing his attention, when he found his mind wandering to his stomach symptoms, he would remind himself to accept his symptoms and to refocus on his main project for the day. When he felt he needed a break from work, he decided to stretch and go for a short walk rather than sitting and focusing on the symptoms.*

## CONCLUSION

Cognitive interventions for health anxiety may focus on teaching the client some of the following skills:

1. To identify the goal of intervention as managing health *anxiety*.
2. To learn to identify anxious and catastrophic thoughts concerning symptoms and illness. To identify triggers for anxious thoughts.
3. To broaden interpretations of physical symptoms to include noncatastrophic possibilities.
4. To estimate probability of feared consequences.
5. To identify coping thoughts to use when confronting anxious thoughts.
6. To increase tolerance for uncertainty about health outcomes.
7. To explore healthy strategies for coping with physical symptoms.
8. To increase acceptance of physical symptoms and distressing thoughts and emotions.
9. To explore healthy strategies for coping with serious illness.
10. To increase acceptance of possibility of serious illness.

The original case formulation and the information from the client's self-monitoring of anxious thoughts will guide the clinician with respect to which techniques to emphasize or identify as priorities. Most clients will benefit from these interventions. Combining the cognitive strategies with exposure interventions may be particularly productive.

CHAPTER 10

# OVERCOMING FEAR OF DEATH

## WHY CONSIDER DEATH ANXIETY IN THE ASSESSMENT AND TREATMENT OF HEALTH ANXIETY?

Fear of death is common in the general population. Agras, Sylvester, and Oliveau (1969) reported that 16% of their community sample reported fear of death and 3.3% reported intense fear of death. In a more recent community study by Noyes and his colleagues (Noyes et al., 2000), 3.8% of respondents indicated they were much more nervous than most people about death or dying and 9.8% indicated they were somewhat more nervous than most people. Developmental studies (Kastenbaum, 2000) indicate that children generally become aware of the issue of death at the preschool level and their understanding of death typically evolves toward a view of death similar to that of adults by the age of ten.

Fear of death is also common in individuals with hypochondriasis. Kellner et al. (1987) compared matched groups of psychiatric outpatients with hypochondriasis, outpatients with nonpsychotic psychiatric disorders (not including hypochondriasis), outpatients in a family medicine clinic, and workers at local companies on subscales of the Illness Attitude Scales (Kellner, 1986). They found that patients with hypochondriasis were much higher than all the other groups on the subscales for Worry about Illness, Concern about Pain, Hypochondriacal Beliefs,

Thanatophobia (death phobia), Disease Phobia, Bodily Preoccupation, and Treatment Experience (use of health services). The other three groups did not show statistically significant differences from each other on the measure of Thanatophobia.

Noyes et al. (2002) studied the relationship between fear of death and hypochondriasis in a sample of 117 women and 45 men attending a general medicine clinic at the University of Iowa. They found a high correlation between scores on a fear of death scale and measures of hypochondriasis, somatization, and health anxiety. Those patients who met DSM-IV diagnostic criteria for hypochondriasis scored considerably higher on the fear of death scale than patients who did not meet criteria for hypochondriasis.

Just as an individual may have specific phobia of illness that does not meet the criteria for hypochondriasis (Noyes, Carney, & Langbehn, 2004), some individuals have specific phobia of death without hypochondriasis or specific fear of illness. Noyes and his colleagues note that specific phobia of illness may arise in the context of a medical illness or a related threat to health and these phobias may be more common in people with medical problems. We also see some individuals with serious illness (cancer, chronic obstructive lung disease) who struggle with an intense fear of death. The treatment may be adapted to these special situations.

## Death Anxiety as a Normal Experience

Just as anxiety is a normal emotion, anxiety concerning death is also a normal experience. In his book *The Psychology of Death,* Kastenbaum (2000) provides a comprehensive review concerning attitudes about death in Western culture. He suggests that views about death develop during the preschool years and evolve through childhood and adolescence. There has been extensive research on death anxiety in nonclinical populations. The overview of this research by Kastenbaum (2000) suggests a number of consistent findings:

1. Most respondents in the community do not report a high level of death anxiety.
2. Females report higher levels of death anxiety than males.
3. In cross-sectional studies, older people do not generally report higher levels of death anxiety than younger people even though they are clearly closer to death. Specific concerns about death differ at different ages and in different life situations.

4. Higher levels of education and higher socioeconomic status are modestly related to lower levels of death anxiety.
5. Higher levels of religious belief and participation in religious practice are not associated with lower levels of death anxiety.

Kastenbaum points out that the modest level of death anxiety that most people experience in everyday life may increase dramatically when the individual experiences a period of stress or threat, such as health problems, illness, or death of someone close.

## ASSESSMENT AND TREATMENT OF DEATH ANXIETY

It is important for the clinician to ask clients about fear of death during the assessment process. As noted in Chapter 5, several self-report questionnaire measures provide information about death anxiety and attitudes toward death, including the Death Anxiety Scale (Templer, 1970) and the Multidimensional Fear of Death Scale (Hoelter, 1979). If it is clear that death anxiety is a concern, it is helpful to ask a few follow-up questions to develop a better understanding of the problem. We ask every client whether they worry a lot about death and dying. If they indicate yes, we ask a number of other questions to broaden our understanding of the problem:

- Could you tell me more about your worries about death? How often do these worries come to you? How do you react when you experience these worries?
- When did you notice that you started to have more concerns about death than most people? Were there any extra stresses in your life at that point?
- What have your personal experiences with death been like over the years? Could you describe them?
- Are there situations you avoid because of concerns about death?
- How do you cope when you are dealing with anxiety about death?

Even though there is a very extensive literature on death anxiety (Kastenbaum, 2000; Neimeyer 1994), to our knowledge there are no controlled studies on the treatment of death anxiety in a clinical context. Studies of CBT treatment of hypochondriasis and other forms of health anxiety (reviewed in Chapter 4) generally do not report the impact of treatment on measures of death anxiety. A few case studies

describing treatment of hypochondriasis or illness phobia indicate that the participants had high levels of death anxiety. Tearnan, Goetsch, and Adams (1985) describe the treatment of disease phobia in a young man who described the onset of intense fear of having a heart attack and dying, following the sudden death of his father-in-law due to a heart attack. The treatment involved exposure to a range of disease-related situations, including imaginal exposure to cues related to death from a heart attack. The client was much improved by the end of treatment and maintained the improvement at follow-up. Papageorgiou and Wells (1998) describe the use of attention training as a CBT intervention with three clients (all age 65 or over) with the onset of hypochondriasis and prominent fear of death more than 10 years earlier, after the death of family members. All the participants had a very positive outcome with attention training as a single component treatment, with no work on exposure, response prevention, or cognitive change beyond the refocusing of attention.

Generally, empirical studies of assessment and treatment of hypochondriasis and other forms of health anxiety do not include a specific focus on fear of death. Since there is good evidence for the effectiveness of current CBT interventions, why should we consider adding specific assessment and treatment of death anxiety? Simpler treatments are easier to disseminate and implement. In our opinion, however, it is worthwhile to consider death anxiety in our interventions because death is so commonly encountered in the media and in the events people will experience during their lives. Treating health anxiety without dealing with death anxiety leaves clients at risk for return of symptoms when they encounter death-related events. Clearly, this area warrants future research.

## A Practical Approach to Treatment

### Exposure

A detailed case formulation, as described in Chapter 5, informs treatment planning. Avoidance is one of the most common ways of dealing with fear of death. People often avoid thinking or talking about death until it intrudes into their life in some way. Consequently, it is helpful to provide clients with a rationale for dealing with the issue of death more directly in therapy. Handout 10.1 describes the rationale and instructions for exposure treatment that we use for death anxiety.

**Handout 10.1.** Overcoming anxiety about death.

## Why face the fear of death?

One of the challenges that all of us face as the years go on is coming to terms with the reality of death. Working to cope with fear of death may be very helpful in coping effectively with anxiety.

Every living thing will eventually die. The chair you are sitting on will never die, but it will also never live. Death is a part of the normal flow of life. There cannot be life without death. This is one of the things that make life so precious – from the life of a flower, to the life of a pet, to the life of a family member, to our own life. This is one of the reasons that it is important to appreciate and enjoy life while we have it.

An important part of being able to enjoy life and cope with its challenges is to be able to deal realistically with death. Most people are able to come to terms with the issue of death as the years go on. This applies both to people with traditional religious beliefs and to people with nontraditional or no religious beliefs. It may be important to consider where you stand on the issues described by the world's religions, but it is not necessary for you to hold traditional religious beliefs to deal with the issue of death.

One of the ways of coping with death is to see the balance in life. In any friendship, for example, a part of the relationship is that you will have to say goodbye some day. One of you will move away or be unavailable or come to the end of life. One day the relationship will end. Some people try to cope with the reality of loss by deciding that they will never have a friend. If you do not have a friend, you cannot lose a friend. This approach protects people from loss but at a huge cost. They give up many days of happiness and satisfaction that come from a good friendship to prevent the smaller number of days of sadness when a friendship ends. Most people would rather take the positive experiences that a friendship can bring and accept that there will be sadness when the relationship comes to an end.

There is a similar balance that applies to life in general. Most of us have the opportunity for many more days of happiness and satisfaction than the days of sadness we will experience when we are saying goodbye to life. The secret of a good life is to treat life as very precious and to live life so that we have many days of happiness as possible. Time passes quickly and many of us will be saying goodbye to life at a time when we would still like to have a few more healthy years.

## The reality of death

Avoiding the issue of death seems to work for most people most of the time. However, at times the usual ways of coping are compromised by intense stress or experiences with death and illness. People may find themselves constantly preoccupied with fears of death, illness, accident, injury, and harm. These fears create distress, limit pleasure and satisfaction in life, disrupt relationships with other people, distract from working effectively, and consume unnecessary energy.

Fears of illness and death are different from many other fears. Many of the things that people fear are unlikely to happen. People who are afraid of flying, for example, are extremely unlikely to be injured or killed in a plane crash. People who are afraid of dogs are unlikely to be injured by a dog. All of us will have to deal with serious illness at some time in our life, however, and all of us will die. As the years go by we will also have to deal with illness and death in people who are close to us.

Some people are so preoccupied by their fears of death that this fear consumes much of their attention and energy. They feel that they cannot enjoy anything unless they can be certain that they will not be dying soon. Without realizing it, they use up the precious days of life worrying about something that may not happen for many years. They were converting possibly happy days into unhappy days. Other people are able to accept the reality of death, come to some peace with the idea, and trust that they will be able to cope with these situations when they come up. They can focus on the task of living a satisfying and happy life.

## Facing your fear of death

The most powerful way to deal with fear of death is face the fear rather than avoiding it. At first glance, this may seem foolish to you. You might say that you are distressed because you are preoccupied with death at every moment. How much more can you face it? How will that help you to feel better? There is, however, a difference between being preoccupied with death and facing and accepting it. We have learned that the best way to overcome fear, including fear of death, is to face the feared situation. Usually it is best to face the fear gradually, a step at a time. The idea of facing one's fears can be quite frightening, at first, but usually this can be accomplished in a way that is not too difficult or painful.

Philosophers suggest that we can only make the best of life when we are able to understand and accept the reality of death. We have all heard stories of people who have faced death and felt their lives changed by that confrontation. Dr. Irvin Yalom has worked extensively with terminally ill cancer patients and describes the startling, inner changes that many of these individuals experienced as they faced death. Some of the forms of personal growth he noted were:

1. Deciding what is important in life and what is not important. Not being troubled by unimportant matters.
2. A sense of liberation: being able to choose not to do those things that they do not wish to do.
3. An enhanced sense of living in the immediate present, rather than postponing life until retirement or some other point in the future.
4. A vivid appreciation of the elemental facts of life: the changing seasons, the wind, falling leaves, the last Christmas, and so forth.
5. Deeper communication with loved ones than before the crisis.
6. Fewer interpersonal fears, less concern about rejection, greater willingness to take risks, than before the crisis (Yalom, 1980, p. 35).

You do not have to be near death to benefit from facing and accepting it. The awareness of death can help you live your life with greater pleasure and satisfaction every day. In helping people come to terms with death we have found that two approaches are helpful. One approach is to overcome your fear of death by facing the reality of loss and death. The second approach is to resolve to live life to its fullest and to get as much enjoyment and satisfaction as possible from each precious day.

### Activities to face death anxiety

We have found it helpful to use some of the following exercises in work on overcoming death anxiety:

1. Write a story about your own death that includes your worst fears. Use this story for 30–60 minutes each day to help you to vividly imagine situations where you would have to face death.
2. Consider any situations that come up in life that you avoid because of anxiety about death. If these are situations that other people would face and that you would like to face, make a plan to face these situations in gradual steps with repeated practice until the anxiety is reduced.
3. If you do not have a will already, prepare a will. If you do have a will review it and make sure it is up to date. There is usually material at the local library or bookstore to assist in preparing a will. It is wise to consult a lawyer about taking the proper legal form in finalizing a will.
4. Write your own obituary using as examples obituaries from people of your age in the local newspaper. (The obituary should be for your current age, not for ten years down the road.) Review and save in a file the obituaries of people close to your age. In reviewing the obituaries imagine what the circumstances might have been around the death.
5. Decide what you would like in terms of funeral arrangements. There may be a local funeral planning society or funeral home that can provide information about choices. Consider whether you would like to follow some family or religious tradition or to plan something that fits with your beliefs and interests. If you are in a relationship discuss these preferences with your partner or a close family member or a friend.
6. Practice dealing with first person accounts of someone (especially someone who is similar to you in some ways) coming toward their own death or the death of a close friend or family member. This may be done through books, magazines, television programs, or movies. This is even more helpful if the cause of death is one of the areas you fear.
7. Visit the grave of a family member or friend.
8. Visit a place that is associated with death for you such as a hospital emergency department, a funeral home, any other place that others would visit but is difficult for you because of death anxiety.
9. Write about or make an audio tape describing a difficult past experience of terminal illness or death that involved a family member or a friend. Use the written account to clearly imagine and face these difficult memories.

In planning exposure, pacing is very important. If fear of illness is prominent for the client, this is often tackled earlier in treatment with a focus on fear of death coming later. It is important to pace the exposure so that the client moves quickly enough to be able to see progress but not so quickly that she feels overwhelmed. We often describe a variety of possible exposure assignments and ask clients which areas they feel ready to work on first. Having clients who write an exposure narrative about their own death is particularly helpful. Some people express concern that if they write a story about a feared future event, their fears will come true. One humorous way we have found to deal with this fear is to ask the client to first write a story about the therapist's winning the lottery. (Sadly, we have yet to win anything this way.) Clients identify the point of this quickly and this often reduces their reluctance to write the story of their own death.

Clients who fear the death of a close family member (parent, spouse, child) often benefit from writing a story about this situation. Many people find this exercise more difficult and emotional than writing about their own death and they may require additional support in working on this task. For some individuals, there may be issues regarding past losses that benefit from therapeutic attention and an exposure approach (e.g., facing the memories and feelings associated with the loss).

Handout 10.1 includes a variety of exposure assignments that are suitable for many clients, such as preparing a will, making funeral arrangements, and writing their own obituary. Exposure to situations that have been systematically avoided is particularly important. To facilitate exposure, it is helpful to have some resource material available, such as funeral planning material and the titles of books and movies dealing with death issues. Elizabeth Kübler-Ross has written extensively about coming to terms with death. She edited an excellent series of accounts from individuals, family members, and friends addressing death issues (Kübler-Ross, 1975). Sherwin Nuland's book, *How We Die* (1994), provides detailed accounts both from a medical perspective and in the first person of how people die from common causes such as cancer, heart disease, Alzheimer's disease, accidents, and crime. Although the content is difficult, the presentation is compassionate. In planning assignments it is important to plan for exposure to be repeated often enough and for adequate time periods so that there is a significant reduction in anxiety.

Given how common the discomfort with issues regarding death is in our culture, it is not surprising that many family members of the client are also uncomfortable with some of these assignments (e.g., making a will, considering funeral arrangements). It is useful to help clients to prepare for discussions with these family members. Naturally, the therapist must

use clinical judgment about the best timing for these assignments. We tend to introduce them early in therapy but if a client is depressed and reporting suicidal thoughts, clearly we would focus on treating depression first and would not focus on death anxiety until there was a clear and persistent improvement in mood.

### Cognitive Reappraisal

Certain thoughts and beliefs about death are common. In exploring this area, it is helpful to review clients' personal experiences with death. Helping the client to move toward more balanced views of these issues may help them to cope more calmly with the prospect of death. Therapists may be able to provide corrective information based on their personal experiences with illness and death. Handout 10.2 lists some of the unrealistic beliefs about death that we commonly encounter and some more realistic beliefs for the client and the clinician to work toward.

### Case Example

The initial assessment with Anna, age 35, indicated that death anxiety, beginning in late adolescence, was her main concern. She reported no current problems with fear of illness or somatization. A review of her current situation indicated she was very satisfied with her work and family life. Her enjoyment of everyday life was very solid, so in this case (unlike many others) it was not necessary to focus on the enjoyment of life. She produced this very eloquent story later as part of her work in imaginal exposure.

*For many years now, I have been preoccupied with worries about money, career, relationships, and material things. As the years passed, I spent little time thinking about the broader picture, the meaning of my life. From time to time, I have had anxiety about death but I never really thought about it realistically, that it could really happen to me. It was always just a fear that I tried to push aside and not think about. That is why what is happening to me now has hit me like a thunderbolt.*

**Handout 10.2.** Challenging your beliefs about death.

| Unrealistic belief | More realistic belief |
|---|---|
| • If I find out that I am going to die, I will not be able to cope with my feelings. My emotions and actions will be so out of control that I will be in constant emotional suffering. This may create great distress for those around me. | • Many people are understandably frightened when they find out that death is approaching. They manage to cope with these emotions as time goes on and most people approach the end of life with dignity. This is also true of people who have a lot of anxiety about death. |
| • Dying is likely to involve terrible pain and suffering in addition to terrible fear. | • Most of us will have many days of health and happiness in our lives. Unfortunately, most of us will also have some days of illness and pain. People have help to deal with the illness and pain and are able to get through this with a good deal of support. Relief of pain is now a high priority in treatment of the dying. |
| • If I die before my children are grown, it will ruin their lives forever. | • Leaving my children behind will be difficult but there are other people who care about them who will help them. It is important to do the best job possible of parenting now. Part of this job is making sure that the children have others who care about them. |
| • I would not be able to cope with death because I do not have a religious faith that gives me confidence and peace in what comes after death. | • People with all different types of religious beliefs, including no beliefs, cope well with death. It is valuable to consider your philosophy about life and death. |

*A few months ago, I noticed that my vision would get blurred and from time to time I would have trouble getting up quickly from sitting to standing. I would feel dizzy for a couple of seconds. But I didn't take it seriously and went on with my life as usual. However, as the weeks progressed, I started having migraines. At first, they came once a week, but then they started to be more frequent. I made an appointment with the doctor. I hoped that these physical changes were hormonal or related to my diet. The doctor gave me a complete physical and found nothing wrong with me. At first I was relieved because I didn't want anything to be found. But the symptoms only progressed and I started to feel that maybe I needed to see a neurologist to get to the bottom of the matter.*

*During the weeks that led up to my appointment for a CT scan, I was very nervous. I felt the nerves in my chest and I was often short of breath. I worried that I would die young. I had concerns about how my family, in particular my children, would cope. The idea of not having control over my body or my mind scared me. What concerns me the most is the physical manifestation of my own death. I am an atheist. I wish I wasn't. Believing in the afterlife would be a relief. But I can't believe what I don't believe. To me, death is mechanical. It is a turning off, a closing down of the mind. That idea is morbid to me. I'm the center of my existence. I'm afraid of not seeing, not hearing, not knowing what is happening around me or what is happening to my body. I can't accept the idea that I will be underneath the ground. It'll be cold there and my body will freeze. In the summer, it will be hot and my body will rot. My skin will shrivel up and my organs will decompose. I'm afraid of the world going on without me. I'm sure this seems egotistical. But I'm all that I've got! After I die, there is no ME anymore. I will disappear and never reappear again. There will never be another ME in history, for as long as the world exists, forever and ever. The inevitability of death makes me feel trapped. I can't escape it no matter what I do. I feel chained to this ultimate course of life. I feel doomed!*

*After the CT scan, I try to forget about my fears. I call the doctor three days later to find out the results. My heart is beating so rapidly. It feels as if it's pumping right through my chest as I wait on the phone for her to answer. The doctor finally answers the phone and tells me she has bad news and that the CT scan results showed that I have a brain tumor. I feel the blood drain from my face. My worst fears have come true. I ask if she is sure and she says, "I'm afraid, yes." How is that possible? I ask if there is something to do about it, and she says, "The tumor has already spread and is incurable." I only have a few months left to live.*

*I feel as if I've entered the abyss. I'm still alive but my life seems no longer to belong to me, to be under my control. We go home and I go straight to bed. I want to be unconscious for a while so I won't have to think about*

*this. That night, my husband and I sit down to tell the children that I'm "going away." They ask for how long, and we say "I'm going to heaven and that I will meet them there." Even though I don't believe this, I feel it's the best way for them to cope with my death. They start to cry and we all cry together and hug and don't want to let go. I feel so sorry for them. I feel that this will shatter their own lives, it'll change who they are and I don't know if they will be able to cope. My son looks terrified and my daughter is confused. I can't do anything to save them from this. It makes me feel very sad and utterly hopeless. I think about their deaths someday and that this life is a tragedy. What is life worth if it all funnels into the same waste? I apologize to them over and over again and tell them that I love them and will always love them no matter what.*

*Two months later, I'm admitted to hospital. The cancer has taken over my brain and I am having trouble thinking and speaking coherently. My head hurts constantly and I am given pain relief. I feel dizzy all the time and have lost my appetite. I have nightmares that I won't wake up. I'm afraid to fall asleep. I can't come to accept this fate. I'm fighting it. But I'm not winning. On the tenth day, with my family around me, holding on to me, I feel that I am losing consciousness. I try to talk. I want to say "goodbye" and tell them that I love them for the last time. But I can't say the words. All I can feel is their touch, their hands holding my hands and I hold on as tightly as possible. I try to see them clearly but they are a blur and I would do anything to snap out of this condition. I gasp for breath. I try to force air into my lungs but they feel like they're closing off. My head feels heavy and my eyes close. I am not at peace. I need more time. I'm not ready. But then, in a moment, I am gone.*

Anna and her husband did not have a will, despite having young children, so they quickly arranged to complete a will. Anna also found it helpful to work out plans for funeral arrangements, even though the discussion of this area with her husband was emotionally challenging. With practice in using her story to assist imaginal exposure, she found that there was a steady decrease in her anxiety about death.

## CONCLUSION

Death anxiety has been a neglected area in the research on treatment of health anxiety. Clinical and epidemiological studies indicate it is a frequent problem. This problem may be approached with CBT in a similar way to other aspects of health anxiety. This approach is well accepted by patients and appears to work well in clinical applications. It will be important to evaluate the impact of treatment of death anxiety in controlled studies.

CHAPTER 11

# SATISFACTION AND ENJOYMENT OF LIFE

## CONCEPTUAL BACKGROUND

When individuals are troubled by health anxiety and somatic concern, their attention is often diverted from a focus on enjoying life. In their struggle to cope with symptoms, they often direct much less effort toward positive goals. Clients often mention how they miss the enjoyment that came from activities that have been disrupted.

The treatment approaches developed for somatization and hypochondriasis (summarized in Chapter 4) often emphasize overcoming avoidance related to the clinical problem. Clients are also encouraged to resume the normal activities that were part of their routine before the onset of the problem – activities such as work, hobbies, exercise, and social life. Some treatment approaches go beyond this to include components on problem solving (often interpersonal problem solving) or assertiveness (Clark et al., 1998; Klimes et al., 1990; Nezu et al., 2001).

Cognitive (Beck, Rush, Shaw, & Emery, 1979) and behavioral approaches to depression (Hopko, Lejuez, Ruggiero, & Eifert, 2003; Lewinsohn, Antonuccio, Steinmetz, & Teri, 1984) often involve treatment components directed at increasing activity level and experiences with satisfying and pleasurable activities. Newer treatment approaches, such as acceptance and commitment therapy (ACT, Eifert & Forsyth, 2005; Hayes,

Strosahl, & Wilson, 1999) put a major emphasis on identifying positive goals in treating a wide range of problems. ACT involves a process of identifying and clarifying the client's values in a number of areas: intimate relationships (marital or other), family, friendship/social, career/employment, education/personal growth and development, recreation/leisure, spirituality, citizenship, and health/physical well-being. Once the values that are most important to the client are clarified, goals and activities consistent with these values are identified. Therapy encourages commitment to these values, goals, and activities as a way of living a more satisfying life and coping more effectively with life challenges and distressing emotions.

We emphasize the importance of establishing goals beyond a focus on symptom reduction. The client establishes the goals in consultation with the therapist. During the assessment, the therapist and client may have identified problem areas that contribute to the client's anxiety or reduce life satisfaction. Common problems include difficult or disappointing relationships, limited social support, a stressful work situation, unhealthy aspects of lifestyle, limited enjoyment of life, and lack of focus on values and goals. Questions used in assessing these areas of function are described later in this chapter.

Handout 11.1 is helpful in introducing clients to the importance of focusing on satisfying and enjoyable activities. Handout 11.2 focuses on establishing goals. The degree of emphasis on these components of treatment will depend on the case formulation. Some people will report a lack of satisfying and enjoyable activities in their life. Others will describe a very healthy lifestyle in this area. Most clients will benefit from a review of values and goals and from a focus on problem solving in areas of difficulty.

**Handout 11.1.** Living life to the fullest.

Most of us have met people who really seem to enjoy life. They enjoy their work. They enjoy their family and friends. They enjoy the everyday experiences that make up most of our lives. They take the time to plan activities that bring them satisfaction. Even people who are coping with health problems are able to enjoy life if they adjust their activities to their health concerns.

Enjoying life is not something that comes by accident. You do not have to be wealthy to enjoy life. When you talk to people about things they really enjoy in life, most of their satisfaction comes not from big splashy events (although big events such as special vacations are great) but, rather, from activities that happen every day. People get satisfaction and enjoyment from:

- A short talk with a good friend
- A joke or a laugh with someone at work
- A job well done
- Interesting reading, radio, television, music, or Internet activities
- A walk in the fresh air
- A visit to a park or a drive in the country
- Good food
- Spending time with a friend, a family member, a child, or a pet
- A hobby or leisure activity

The list could go on endlessly. Enjoyment of life involves an openness and commitment to seeing and appreciating the beauty around us. It comes from a willingness to enjoy the everyday experiences in life that may bring a feeling of satisfaction or pleasure. Enjoyment should not wait for your retirement years, your vacation, or for the return of good health. It can come frequently throughout every day. There are probably many activities that you could enjoy more if you paid more attention to them. Satisfaction and enjoyment give you the strength to deal with the challenges that life will always bring.

## Activities that Bring you Enjoyment

Take a minute now to think of the activities that have given you feelings of satisfaction and enjoyment in the past – perhaps at a happier time in your life. List some of these activities on the lines below:

_____

_____

_____

_____

_____

_____

Think about the activities that brought you feelings of satisfaction and pleasure when you were a child and a teenager. List some of those activities:

Are there activities that you describe above that you could include in your plans for each week? Are there some activities in your routine already that you could focus on enjoying more? What activities can you focus on in the coming weeks to increase your feelings of satisfaction or enjoyment in life? You may want to add some of these activities to the goals that you will identify in the following section.

**Handout 11.2.** Reviewing your goals and establishing new ones.

As you review the satisfaction and enjoyment you are experiencing in life, it is helpful to clarify your goals in treatment and in life in general. The Goal Sheets on the next pages will help you think about the things you would really like to do with your life. Imagine that at some point in the future you will be looking back at your life. What would you like to be able to say about your life? What about your relationships with your family and friends? What about your work life and your personal experiences over the years? What about your involvement in the community, your spirituality, and your care for your health? What activities will bring you satisfaction and enjoyment over the years?

Many people find it hard to think about what they want out of life because they cannot imagine life without the limitations caused by health problems or by anxiety. They would like to go on a vacation, but they cannot imagine traveling on an airplane because of their anxiety. They would like to volunteer in a nursing home, but they cannot imagine being comfortable around people who are ill.

In thinking about your life goals, it is important to put your fears and health concerns aside and imagine a life that is not greatly hampered by these factors. You may also want to review your list of satisfying and pleasurable activities to see if some of these could be included in your goals. For example, if spending time with a friend is something that has given you a lot of pleasure in the past, a positive goal might be to do this more regularly.

In establishing your goals, also consider situations and activities you may have avoided because of health concerns. Overcoming unnecessary avoidance may be important as a way of increasing your enjoyment of life.

You can worry later about how you will reach your goals, but for now, focus on deciding what your goals and dreams really are. People who are working toward clear goals in life are less likely to be troubled by problems with anxiety and depression and more able to cope with health problems.

## Life Goals

Start by thinking about your life goals. Let your imagination go free. What would you want from your life if you did not have difficulties with health or anxiety? What would you want in the area of work? Education? Family? Romance? Holidays? Hobbies? Friends? Make your list specific and concrete. We would all like to be happy and live with a minimum of pain and anxiety, but these are general goals, which are hard to work toward directly. There is space for you to write in five life goals, but feel free to think of as many goals as you can. Get a blank sheet of paper and have fun imagining a new life!

> Good example: "I would like to get on a plane and take a winter holiday once every two years."

This is a good example because it is specific and concrete: you can tell exactly what you want to do and how often you would like to do it. It will be clear to you when you reach your goal.

Poor example: "I want to be happy and never be anxious again."

This is a poor example for two reasons. (a) It is not specific and concrete – how can you tell when you have actually achieved it? What do you have to do to be happy? (b) Anxiety is a normal, healthy part of life experienced by everyone. It is not reasonable to expect a life completely free of anxiety.

### Medium-Term Goals

These should be goals that you can imagine working on in the next year. They may be steps on the way to your life goals. They may be activities you have avoided because of anxiety or health concerns. Be very specific and concrete about these goals.

Good example: "I will start a course in Medical Terminology at Williams College in spring."

This is a good example because it is specific and concrete and may move you toward your long-term goal of an interesting career. The wording of the goal makes clear what you will have to do to attain it and makes it easy to tell when you have achieved it.

Poor example: "Go back to school sometime."

This is a poor example because it is not specific enough. What school do you mean? What course do you want to take? When are you planning to do it? We often just don't get around to working on vague goals that are not very specific.

### Short-Term Goals

These should be goals you are willing to start working on in the next three months. You may want to take some of your medium-term goals and break them down so that you can start to work on parts of them right away. Think of at least eight short-term goals you can start in the next three months. Be sure to work on things that will move you closer to your medium-term goals. Make your short-term goals specific and practical.

Good examples: "Visit my aunt in the nursing home once a week."

"Do a breast self-exam once a month."

"Exercise on the treadmill for 20 min three times a week."

These are good examples because they are small enough to be worked on in the next three months and specific enough so that you know exactly what you want to do and how often you want to do it.

Poor examples: "Spend more time with relatives."

"Take care of my body."

"Exercise and not feel any anxiety."

These are poor examples for two reasons: (a) They are not specific enough and (b) the goal of not feeling any anxiety is not a realistic one. If you feel you must do things without any anxiety, you will probably feel as though you have failed. Anxiety is a normal part of life. Doing things in spite of anxiety and managing the feelings are more reasonable goals. Anxiety will decrease with continued practice.

Before filling out your own goal sheet, look over the example on the next page. Notice that the goals are specific and concrete.

Now, fill out your own goal sheet. Make some extra copies of the blank sheet in case you want to do a few drafts and to allow you to keep developing your goals as you make progress. You may want to consider whether you want to develop goals related to overcoming areas of avoidance related to health problems or anxiety.

Once you have written out your list of goals, rank your medium-term and short-term goals in order of difficulty. Put #1 beside the most difficult goal, #2 beside the next most difficult, and so on.

**SAMPLE**

GOAL SHEET DATE: April 6

As you complete this sheet, think about not only your goals for overcoming anxiety problems but also your goals for the rest of your life – your career and home life, for example.

After you have listed your goals, rank them according to difficulty, with 1 being most difficult.

## Difficulty

Long-term goals: (rank from 1–5)

1. *Finish college degree.* *1.*
2. *Plan family vacation in Florida.* *5.*
3. *Move to the country.* *3.*
4. *Review career path and continue upgrading skills.* *4.*
5. *Learn to ski.* *2.*

Medium-term (1 year): (rank from 1–5)

1. *Take a college course in spring.* *5.*
2. *One-week vacation to Vancouver – summer.* *4.*
3. *Take a first-aid course.* *1.*
4. *Join aerobics class at the gym.* *3.*
5. *Develop healthy eating routine for family.* *2.*

Short-term (three months): (rank from 1–8)

1. *Go for 30-min. walk every day.* *4.*
2. *Prepare my will with my spouse and plan for children.* *2.*
3. *Talk with spouse about wishes for funeral plans.* *1.*
4. *Get together with a friend for lunch once a week.* *8.*
5. *Take a photography course at community center.* *5.*
6. *Volunteer twice a week at local school.* *3.*
7. *Plan a fun activity with family every weekend.* *6.*
8. *Complete assignments every week in health anxiety program.* *7.*

GOAL SHEET DATE:

As you complete this sheet, think about not only your goals for overcoming anxiety problems but also your goals for the rest of your life – your career and home life, for example.

After you have listed your goals, rank them according to difficulty, with 1 being most difficult.

## Difficulty

Long-term goals: (rank from 1–5)

1. _____ ____
2. _____ ____
3. _____ ____
4. _____ ____
5. _____ ____

Medium-term (1 year): (rank from 1–5)

1. _____ ____
2. _____ ____
3. _____ ____
4. _____ ____
5. _____ ____

Short-term (three months): (rank from 1–8)

1. _____ ____
2. _____ ____
3. _____ ____
4. _____ ____
5. _____ ____
6. _____ ____
7. _____ ____
8. _____ ____

## MINDFULNESS

The concept of acceptance was addressed in Chapter 9 as an approach to overcoming anxiety. The broader concept of mindfulness incorporates notions of acceptance and the importance of living fully in the present moment. Kabat-Zinn (1994) has proposed a brief and nontechnical definition of mindfulness:

> Mindfulness means paying attention in a particular way: on purpose, in the present moment, and non-judgmentally. This kind of attention nurtures greater awareness, clarity, and acceptance of present-moment reality. It wakes us up to the fact that our lives unfold only in moments. If we are not fully present for many of those moments, we may not only miss what is most valuable in our lives but also fail to realize the richness and depth of our possibilities for growth and transformation (p. 4).

Mindfulness has been practiced for thousands of years in a variety of meditative traditions. In recent years, these views have been brought into the fields of health and psychology by clinicians and researchers such as Jon Kabat-Zinn (1994, 2003) and Marsha Linehan (1993). The emphasis in mindfulness approaches on living in the present and acceptance of both positive and negative experiences may have a very useful application for individuals who are preoccupied with future dangers, past disappointments, and current health concerns.

The most extensive research on this approach has evaluated the mindfulness-based stress reduction group program developed by Jon Kabat-Zinn. This approach has been applied to a wide range of clinical problems, including pain, cancer, heart disease, depression, and anxiety, as well as to nonclinical groups focused on stress reduction. A typical program involves eight to ten weekly sessions of 2.5-hours duration with an additional all-day weekend session. Exercises during the sessions cover different kinds of mindfulness meditation and mindfulness during stressful situations and social interactions. Participants make a commitment to practice various aspects of homework for 45 minutes each day. A meta-analytic review of the health benefits of this approach was published recently by Grossman, Niemann, Schmidt, and Walach (2004). They identified 20 studies with acceptable quality and found effect sizes in the range of $d = 0.5$, which is judged to be a medium-size effect with this statistic. The reviewers concluded that this approach may help individuals with diverse health and stress concerns to cope more effectively with their problems. While some studies point to the enduring nature of these effects, the authors indicate that more research is necessary on the long-term effects of this approach. Baer (2003) provides a similar evaluative

review of mindfulness approaches (and comes to similar conclusions) with a very clear description of the treatment approaches that have incorporated mindfulness concepts.

Linehan (1993) has incorporated an emphasis on mindfulness in her dialectic behavior therapy program for borderline personality disorder. The materials she has prepared for clinicians, including a very helpful videotape series (Linehan, 2003), illustrate how ideas related to mindfulness can be integrated into clinical practice. Kabat-Zinn (2003) and most others working in the field emphasize the importance of training and practice in mindfulness meditation for those who plan to incorporate this approach in their work. At the same time, Hayes and Shenk (2004) point out that mindfulness is a psychological process that may be taught and practiced in a variety of ways and is not limited to the mindfulness meditation that has been used in some approaches (Kabat-Zinn, 1994; Segal, Williams, & Teasdale, 2002). Mindfulness approaches have the potential to assist clients in coping with negative experiences more effectively and in finding more enjoyment in everyday experiences. The interested reader is encouraged to refer to the sources listed earlier (particularly the review by Baer, 2003) to obtain more information about this promising approach.

## A HEALTHY LIFESTYLE

Surveys of health anxiety indicate that, on average, individuals who report a high level of health anxiety do not have a more or less healthy lifestyle than others in the same community (Kellner et al., 1987). This is surprising, considering the high degree of health concern they experience. An assessment of lifestyle may identify positive goals to help channel health concerns in more realistic directions. Goals in this area may be integrated with the goal-setting process outlined earlier. In assessing functioning in these areas, it is helpful to explore previous successful and unsuccessful experiences related to health behavior. Knowledge of this history is useful in developing realistic goals. It is helpful to explore these areas at the time of the initial assessment. The following questions may be helpful in evaluating the client's health behavior:

**Do you have a pattern of regular exercise?** Both cardiovascular exercise and exercise focused on strength and flexibility are important to long-term health. If these are areas of limited activity, your client may benefit from focusing on developing a schedule of regular exercise. Individuals are more likely to maintain an exercise routine if it involves

social contact (a friend, family member, or group activity) and if it fits easily into the daily routine. Regular exercise has positive effects on mood and ability to manage stress.

**Do you have any difficulties with your sleep?** Sleep difficulties and preoccupation with sleep are very common among people with problems with anxiety, depression, chronic pain, or somatic concerns. There are very effective approaches to sleep difficulties that involve an understanding of behavioral aspects of sleep. It is helpful if the therapist is informed about the evidence-based treatment approaches in this area (see, for example, Morin & Espie, 2003).

**Do you have healthy eating habits? Could your eating pattern be improved?** A healthy diet also has a very positive impact on health. Many clients are aware of difficulties in their diet and improvements in this area may be a worthwhile area for behavior change.

**Do you have enough time in your day so that you are not always rushed?** In order to enjoy life, it is important to have enough time to enjoy both work and leisure activities without a constant feeling of time pressure. Many people benefit from work on managing time and activities to reduce feelings of time pressure. For many people with anxiety, perfectionism may be an issue that should be addressed.

**Do you have adequate time for leisure each day?** We encourage people to arrange work and family commitments so that they have some time for leisure and relaxation each day. This may be particularly challenging for parents of young children.

**How are your relationships with family? Are there any relationships that are difficult for you? [If applicable] How about your relationship with your partner? Are there any areas that are difficult for you? How are your relationships with friends? Do you see friends regularly?** Relationships with family and friends are an important area of satisfaction for most people. When people are experiencing problems with health anxiety or somatic concerns, these relationships may be neglected or disrupted. In some cases, difficulties in relationships are a source of stress that may improve with problem solving. In other cases, increasing contacts with friends and family may increase the amount of enjoyment in life. This is an area for considerable clinical attention because relationships are so important to the enjoyment of life.

**Are you smoking regularly?** Quitting is a major challenge for most smokers. A complication is that nicotine allows people to tolerate unpleasant emotions with less distress. We suggest that smokers first work to manage difficulties with anxiety and depression. When they are experiencing a lower level of everyday stress, we encourage people to become involved in a structured smoking cessation program. Some of the best programs

achieve rates of nonsmoking in the range of 25% by six months after the program is completed. People should understand that they may have to make several attempts in order to successfully quit smoking.

**Many people have a few drinks when they are with friends or after work. Do you have a favorite drink? How many drinks do you usually have in an evening on your days off? How about on a work day?** Many people risk health problems because of heavy alcohol use. One guideline is that more than four drinks regularly on one occasion or even daily alcohol use at slightly lower levels carries some health risk. Heavy alcohol use can also contribute to problems with anxiety and depression. When a pattern of excessive alcohol use is identified, addressing this issue is a high priority in treatment.

**Many people experiment with recreational drugs such as marijuana and cocaine, especially when they are younger. What have been your experiences with this?** As is the case with alcohol use, current excessive use of street drugs should be addressed in planning treatment.

**Most people have some sources of stress in their lives. They may be related to financial pressures, work pressures, problems with children, problems with family members who are ill, family disagreements, and so on. What are the pressures in your life right now?** The clinician should review the identified areas of stress to see if some work on problem solving as part of the treatment would be appropriate.

## CONCLUSION

The work on establishing goals, including those related to a healthy lifestyle, is used to create a focus during treatment on moving toward valued goals. As much as possible, the clinician allocates time during each session to this topic to balance the work on overcoming symptoms. We try to ensure that the client experiences satisfying and enjoyable activities on a daily basis. Assignments related to this focus are included in the Daily Assignment Logs described in Chapter 6. The aim is to create an ongoing emphasis on enjoying life in spite of any health problems or concerns.

CHAPTER 12

# PHARMACOLOGICAL TREATMENT

Prior chapters have discussed the rationale for the use of cognitive-behavioral approaches to the treatment of health anxiety, reviewed the evidence of their efficacy, and described in detail parameters for the implementation of such therapies. In some cases, there may be a rationale for the use of a pharmacological approach to health anxiety, either as a stand-alone treatment or, more likely, in combination with a psychological approach. The evidence base for the efficacy of psychopharmacological treatments for health anxiety is very limited, with – at the time of this writing – not a single large-scale (though there is one smaller scale), placebo-controlled study in the literature addressing the prototypical health anxiety syndromes of either hypochondriasis or somatization disorder. Still, there are a number of uncontrolled studies from which information may be gleaned, and a number of well-controlled studies in related areas (e.g., anxiety disorders; body dysmorphic disorder [BDD]) that speak to the potential utility of psychopharmacological treatments for health anxiety. These studies will be considered here with the aim of providing tentative, defensible recommendations to clinicians for the medication management of health anxiety, while we await (we hope) the conduct of more definitive studies.

## REVIEW OF THE EVIDENCE FOR THE EFFICACY OF PHARMACOTHERAPY

The pharmacotherapy of somatoform disorders was the subject of a recent review (Fallon, 2004), in which it was viewed that the "obsessional" cluster of somatoform disorders (i.e., hypochondriasis and BDD) responds well to treatment with selective serotonin reuptake inhibitors (SSRIs), whereas the evidence for their usefulness with the "somatic" cluster (i.e., somatization or pain disorder) is much more limited. In light of our focus on health anxiety, which seems to be more closely linked to the "obsessional" cluster of somatoform disorders than to the "somatic cluster," our review will be limited to the evidence for the efficacy of pharmacotherapy in hypochondriasis, BDD, and other somatoform disorders with a bodily preoccupation focus that fall outside the BDD diagnosis (e.g., delusional disorder, somatic type).

## PHARMACOTHERAPY OF HYPOCHONDRIASIS

One of the earliest reports of psychopharmacological treatment for a condition marked by health anxiety was an open-label trial of imipramine for "illness phobia," which the authors consider a subtype of hypochondriasis (Wesner & Noyes, 1991). In that study, 10 subjects with illness phobia were treated with imipramine for 8 weeks. All the 8 subjects who remained on the drug for 4 weeks or more reported at least moderate improvement. The authors report that adverse effects of medication ("over stimulatory reactions") occurred in 4 subjects, causing two to discontinue medication. They concluded that imipramine appears to be a potentially useful treatment for this subtype of hypochondriasis, but that side effects from medication – which can be particularly frightening for patients with illness phobias – require attention and may limit treatment acceptability and adherence. In fact, it is well known that tricyclic antidepressants (TCAs) such as imipramine are often difficult to administer to anxious-phobic patients (e.g., patients with panic disorder and/or agoraphobia) who tend to experience a "jitteriness" syndrome unless the dose is started low (e.g., 5 or 10 mg/d starting dose) and tapered upward very slowly (Pohl, Yeragani, Balon, & Lycaki, 1988). In the case of panic disorder, the SSRIs have proven to be easier for some patients to tolerate, particularly when treatment is first initiated. This class of antidepressants has largely replaced the TCAs in the treatment of anxiety (and depression), and has drawn more recent attention for the treatment of hypochondriasis and related conditions.

Several case reports describe favorable results of SSRIs and other antidepressants for hypochondriasis, as reviewed elsewhere (Enns et al., 2001). To date, there have been only three reports of open-label trials of treatment of hypochondriasis with SSRIs or atypical antidepressants. Fallon et al. (1993) conducted an open trial of high-dose fluoxetine for patients with DSM-III-R hypochondriasis who did not meet criteria for major depression. Ten of 16 patients were much improved at the end of 12 weeks. In another study, the same research group conducted a 12-week, open-label trial of the SSRI fluvoxamine in 18 patients with DSM-IV hypochondriasis (Fallon et al., 2003). Four patients discontinued during the two-week placebo run-in phase. In 14 patients given fluvoxamine, the response rate was 72.7% ($N$ = 8 of 11) for those completing at least 6 weeks of the trial. Fluvoxamine was also well tolerated by the patients. Kjernisted and colleagues (Kjernisted et al., 2002) treated 11 patients with a primary diagnosis of DSM-IV hypochondriasis with 8 weeks of the atypical antidepressant nefazodone (which, it should be noted, has since been withdrawn from the market in many countries, including the US and Canada, due to concerns about liver toxicity), using a maximum dose of 600 mg/day (mean dose was closer to 400 mg/day). Two patients dropped out before completing the trial. Of the 9 patients completing the trial, 5 were rated as much or very much improved on the clinician-rated global improvement scale. Several open-label evaluations of antidepressants with somatoform disorder have been reported with generally favorable results (Menza et al., 2001; Noyes et al., 1998).

Only a single, small, randomized placebo-controlled trial for hypochondriasis has been published as an interim report of an ongoing trial (Fallon et al., 1996). In that study, of 20 patients randomized to treatment, 16 completed at least 6 (of an intended 10) weeks of therapy. Of these, 8 of 10 patients (80%) who received fluoxetine for at least 6 weeks were classed as responders, as compared to 3 of 6 randomized to placebo. In that study, patients were started on 20 mg/d of fluoxetine and increased, as needed, to 80 mg/d. The sample size in this study was small and statistical comparison did not reveal a statistically significant difference between medication and placebo. Though the results of the full study have not yet been published, the authors have subsequently alluded to the fact that the final results of the study significantly favored fluoxetine over placebo (Fallon, 2004).

A conservative view would be that these medications should be considered for the treatment of coexisting psychiatric conditions in patients with hypochondriasis (Barsky, 2001a). The studies reviewed earlier provide a guardedly optimistic basis for considering that SSRIs and certain other antidepressants may be useful in the treatment of hypochondriasis

and other somatoform disorders, even in the absence of comorbid depressive or anxiety disorders. In general, though, the magnitude of effects is somewhat smaller than is typically seen in published open-label clinical trials – where positive findings tend to be reported, and negative findings not – perhaps auguring even less well for anticipated benefits in large, randomized controlled trials of pharmacotherapy. Such trials, however, remain to be conducted.

## PHARMACOTHERAPY OF MEDICALLY UNEXPLAINED SOMATIC SYMPTOMS

Somatization disorder, characterized by multiple unexplained somatic symptoms, is a fairly uncommon phenomenon, occurring in only 1–2% of the general population (Karvonen et al., 2004; Ladwig, Marten-Mittag, Erazo, & Gundel, 2001). However, when a more liberal definition is used (e.g., fewer than the six medically unexplained symptoms required to meet the DSM-IV criteria for somatization disorder), or when somatization is considered as a process, many more individuals are affected (Allen, Gara, Escobar, Waitzkin, & Silver, 2001; Escobar, Rubio-Stipec, Canino, & Karno, 1989; Rief et al., 2001). Another way of characterizing such individuals is to think of them as suffering from medically unexplained somatic symptoms.

The literature on pharmacotherapy of medically unexplained somatic symptoms is difficult to assess, partly because most of the data are uncontrolled, and partly because the criterion of being "medically unexplained" is variously met. Furthermore, in many studies, the "medically unexplained" symptoms are actually *well explained* by the presence of a mental disorder, such as major depression or panic disorder. Depressive and anxiety disorders respond well to a variety of pharmacotherapeutic approaches, and it is therefore not surprizing that the somatic components of these illnesses (e.g., pain in major depression or chest pain in panic disorder) usually follow suit (e.g., Kroenke, Messina, Benattia, Graepel, & Musgnung, 2006). There is tentative evidence, however, that certain types of medically unexplained somatic symptoms may respond to antidepressant treatment, even in the absence of a concurrent mood or anxiety disorder. For example, in the first randomized, double-blind, placebo-controlled study of a psychotropic medication for chest pain with normal coronary angiograms, the investigators found substantial benefit of imipramine 50 mg administered nightly (Cannon et al., 1994). The benefit was observed in patients irrespective of the presence of current or past psychiatric illness. Similar results for chest pain of

noncardiac origin have also been obtained with SSRIs (e.g., sertraline; Varia et al., 2000). A meta-analysis showed that antidepressant therapy was more effective than placebo in more than two thirds of the most rigorously controlled studies of headache, fibromyalgia, irritable bowel syndrome, tinnitus, chronic pain, and chronic fatigue (O'Malley et al., 1999). The mechanism of action is, at present, poorly understood, but may be similar (or identical) to the mechanism(s) by which certain antidepressants alleviate some kinds of chronic pain (Carter & Sullivan, 2002; Lawson, 2002).

## PHARMACOTHERAPY OF OTHER TYPES OF SOMATOFORM DISORDER

"Delusional hypochondriasis" refers to the false, fixed belief of having a physical illness. In DSM-IV terminology, some such cases would be classified as delusional disorder, somatic type. In clinical practice, there seems to be a continuum with which fixed beliefs about illness are held, ranging from concerns about health in general, which may not settle on any particular disease entity or bodily part (e.g., as commonly occurs in GAD), to more strongly held beliefs that one has a particular illness (e.g., as seen in hypochondriasis), to unshakable certainty that a serious illness (e.g., cancer or AIDS) is present. In some cases, the latter intensity of beliefs is accompanied by particularly odd content, such as the belief that the individual is emitting a foul odor, or is infested with insects, or infected with rabies. Some researchers have referred to such an entity as (monosymptomatic) hypochondriacal psychosis to denote the focal, intense, and very irrational or bizarre nature of the illness concerns. DSM-IV refers to a particular subclass of this entity, wherein the individual believes that a certain body part is ugly or misshapen, as BDD (Phillips, McElroy, Hudson, & Pope, 1995). Psychopharmacological treatment studies have been conducted in these entities, and their findings are germane to the treatment of some cases of health anxiety.

### Delusional Hypochondriasis

Early research in the area of hypochondriacal psychosis conceptualized these as psychotic disorders and generally recommended that high-potency antipsychotic medications (e.g., pimozide) be used (as reviewed in Enns et al., 2001). Interestingly, despite the move in recent years toward the use of a typical neuroleptics for indications as diverse as psychotic symptom control, mood stabilization, and anxiolysis, there does not

appear to be a renaissance in antipsychotic use (atypical or other) for hypochondriasis ("delusional" or otherwise). Rather, antidepressants have emerged as the treatment most often studied (and recommended) for these conditions, based largely on successes in the study and treatment of BDD.

## Body Dysmorphic Disorder

The first randomized controlled study for BDD enrolled 40 patients, of whom 29 were randomized, into a 16-week, double-blind, crossover-design study comparing clomipramine (a cyclic antidepressant with strong serotonin reuptake blockade properties) to desipramine (a cyclic antidepressant virtually devoid of serotonin reuptake blockade activity, but with strong norepinephrine reuptake blockade effects). Clomipramine proved superior to desipramine, even among delusional patients (Hollander et al., 1999). This study provided the first solid evidence consistent with the hypothesis that, as in the treatment of obsessive-compulsive disorder, serotonin reuptake blockade is a requisite property of antidepressants that are useful for treating somatoform disorders. Furthermore, consistent with the view that delusions in these disorders are merely part of a continuum of fixed somatic beliefs that need not necessarily be treated with antipsychotic medication, it set the stage for further testing of antidepressants in delusional and nondelusional patients with BDD.

Subsequently, after the appearance in the literature of many case reports and case series (which will not be reviewed here) touting the benefits of SSRIs for BDD, and a chart review that echoed this conclusion (Phillips, Albertini, Siniscalchi, Khan, & Robinson, 2001), a randomized, placebo-controlled study was conducted. In that study (Phillips, Albertini, & Rasmussen, 2002), the investigators enrolled 74 and randomized 67 patients with DSM-IV BDD (or delusional disorder, somatic type, which the investigators referred to as the "delusional variant" of BDD) to either fluoxetine or placebo. Using a version of the Yale-Brown obsessive compulsive scale that was modified for the BDD (BDD-YBOCS), investigators found that fluoxetine was significantly more effective than placebo for BDD beginning at week 8 and continuing through the end of the 12-week study. The response rate was 18 (53%) of 34 to fluoxetine and 6 (18%) of 33 to the placebo, a statistically significant difference clearly favoring fluoxetine. As was the case in the earlier clomipramine study (Hollander et al., 1999), the BDD symptoms of delusional patients were as likely as those of nondelusional patients to respond to fluoxetine. Taken together, these two randomized controlled trials strongly support the efficacy of (selective)

serotonin reuptake inhibitors in the treatment of BDD, considered to be a type of somatoform disorder. A recent placebo-controlled study attempting to increase the response rate by adding the neuroleptic pimozide (or placebo) to fluoxetine treatment suggested that this was not an efficacious strategy (Phillips, 2005). There is thus a pressing need for additional research on pharmacotherapy of BDD.

## PRACTICAL CONSIDERATIONS

In spite of the limited research on pharmacological treatment and the absence of information on long-term outcome, this is the most widely available treatment (because physicians are able to prescribe and insurers will usually reimburse) for hypochondriasis and other somatoform disorders (Fallon, 2004). Enns et al. (2001) point out that many of these individuals have comorbid anxiety or depressive disorders and these pharmacological treatments (usually SSRIs or serotonin-norepinephrine reuptake inhibitors) have been shown to be effective in these disorders.

It is impossible, given the current state of affairs, to provide evidence-based guidelines for the pharmacologic management of health anxiety. To the best of our knowledge, no governing agency has approved any pharmacotherapeutic agent for this group of conditions. It is possible, however, to provide some general information about how antidepressants are usually prescribed, and how these might be applied by physicians to the treatment of health anxiety. It is anticipated that, in many cases, pharmacotherapy will be provided as an adjunct to CBT for health anxiety. But when this is not possible (or not desirable), pharmacotherapy alone can be considered.

### Tricyclic Antidepressants

Tricyclic antidepressants (TCAs) have been on the market since the 1960s, and although their use for the treatment of depression and anxiety has waned in recent years (mainly because of the increasing popularity of the serotonin reuptake inhibitors, which tend to be better tolerated by patients and are arguably safer to administer), are still widely used for the management of pain. There are many different TCAs on the market, though the most widely used for pain are probably amitriptyline *(Elavil)* and imipramine *(Tofranil)*, both of which are available in generic form. Doses of either of these medications for health anxiety would typically be in the range of 10 or 25 mg as the starting dose, increasing to 50 mg if needed after a week or two. Patients should be encouraged to take the medication

regularly, not missing any doses if possible. If a bedtime dose is missed, it is usually best to skip the dose and resume the following night, rather than "catch up" by taking a dose the following morning. Optimal duration of treatment for health anxiety is unknown, but customary practice is to administer them for 6–12 months if they are proving beneficial, and to reassess their benefits (and any adverse effects) on a regular basis. These TCAs are usually given as a single bedtime dose, which can sometimes help with sleep, but also can help increase the tolerability of these medications, which have anticholinergic effects that can be bothersome. Anticholinergic side effects frequently include dry mouth and, particularly in older adults, constipation, trouble urinating, and blurred vision (particularly for reading and other close-up viewing requirements). Weight gain and sexual side effects are not uncommon. The TCAs can also be dangerous for certain individuals, and are contraindicated in patients with existing severe hepatic or renal damage, in patients with seizure disorders or glaucoma, and in patients who have recently suffered a myocardial infarction (heart attack) or who have some other types of heart problems. Imipramine should not be given in conjunction with, or within 14 days of, treatment with monoamine oxidase (MAO) inhibitors, another type of antidepressant. Combined therapy of this type could lead to the appearance of serious interactions such as hypertensive crises, hyperactivity, hyperpyrexia, and spasticity. Severe convulsions or coma and death may occur. There are other possible drug interactions that are too numerous to mention here; detailed drug prescribing information should be consulted.

### Selective Serotonin Reuptake Inhibitors and Dual (Serotonin and Norepinephrine) Reuptake Inhibitors

Selective serotonin reuptake inhibitors (SSRIs) are another class of antidepressant medication that came to the market in the mid-1980s. SSRIs increase serotonin levels in the brain, and are believed to relieve depression and anxiety through this mechanism. The first SSRI to be marketed in the US was fluoxetine (Prozac), followed by sertraline (Zoloft), paroxetine (Paxil), fluvoxamine (Luvox), and citalopram (Celexa). Several of these medications are currently available in generic form. A controlled-release form of paroxetine (Paxil-CR) is also available, as is a single-isomer form of citalopram, escitalopram (Lexapro in the United States; Cipralex in Canada and some other countries); each of these is touted as being better tolerated than their chemical predecessors. Dual reuptake inhibitors, alte natively referred to as serotonin norepinephrine reuptake inhibitors (SNRIs), are another class of antidepressant medication that came to the market in the 1990s. Like TCAs, these medications block serotonin and

norepinephrine reuptake, but with much less in the way of anticholinergic and antihistaminergic side-effects. Two antidepressants from this class currently available in certain countries such as the US are venlafaxine extended-release (Effexor XR) and duloxetine (Cymbalta).

The SSRIs and SNRIs have been shown to help reduce various forms of anxiety, including panic disorder, obsessive-compulsive disorder, generalized anxiety disorder, post-traumatic stress disorder, and social anxiety disorder. Although certain of these medications have been tested more extensively for one indication or another within this spectrum of anxiety problems, they are all probably effective for each condition. To the best of our knowledge, none of these medications is indicated by any governing agency for the treatment of any of the conditions that fall under the rubric of health anxiety. Still, as reviewed earlier, there is limited evidence that may be helpful for some patients, and a therapeutic trial may be considered after explaining to the patient the potential risks and benefits.

Doses of each of these medications differ, and physicians should consult the medication's prescribing information directly for dosing directions (and drug interaction information). The low to middle part of the dosage range (for depression) is customarily used in the treatment of health anxiety, though full antidepressant dosages can be considered on a case-by-case basis, depending on response and tolerability. If a lower dose is ineffective but well-tolerated, it is reasonable to increase the dose further (until side-effects supervene) with the aim of achieving a therapeutic response. Like the TCAs, the SSRIs and SNRIs are taken regularly, usually once daily. Sometimes they are taken in the morning (as in the case of fluoxetine, which can disrupt sleep if taken too late in the day), or in the evening (as in the case of paroxetine, which may help with sleep). Others, such as sertraline, citalopram, or escitalopram, are typically taken in the morning, but can be shifted to the evening if they cause drowsiness. Patients should be encouraged to take the medication regularly, not missing any doses if possible. Optimal duration of treatment for health anxiety is unknown, but customary practice is to administer them for 6–12 months if they are proving beneficial, and to reassess their benefits (and any adverse effects) regularly.

SSRIs and SNRIs are generally well tolerated, but can elicit some side effects. These can include sleep problems, drowsiness, lightheadedness, nausea or other gastrointestinal upset, weight gain, and reduced sexual function. Most of these side effects get better with time. But the sexual side effects – mainly delayed ejaculation for men and difficulty reaching orgasm for women, though diminished sexual desire and erectile problems can also occur – often do not diminish with time. If a patient has problematic side effects with a given SSRI, a switch to a different SSRI may prove helpful.

## CONCLUSION

The pharmacotherapy of health anxiety is still largely unexplored from an evidence-based perspective, and a great deal of additional research remains to be accomplished. Nevertheless, the clinical imperative to help our patients has led to psychotropic treatment for these conditions that is presumed to be fairly widespread. When a comorbid psychiatric condition such as an anxiety or depressive disorder is present, the clinician should feel confident prescribing an antidepressant with the aim of reducing the disorder's primary symptoms, as well as accompanying health anxiety. A role for benzodiazepines (or newer antianxiety agents such as pregabalin [Pande et al., 2003], which also have been shown to be effective against certain forms of chronic pain including some neuropathies, [Sabatowski et al., 2004; Van Seventer et al., 2006]) remains to be systematically explored. When a comorbid psychiatric condition is *not* present, psychotropic treatment may still be considered, but this should be done with the knowledge that the evidence base is sparse and that no governing body has approved any medication for treating health anxiety. Under such conditions, the clinician should enter into a well-informed dialogue with the patient about the advisability of an individualized clinical therapeutic trial, emphasizing the benefits that might be achieved in the context of the risks that might be expected.

CHAPTER 13

# TROUBLESHOOTING AND SPECIAL ISSUES IN TREATMENT

## INCREASING MOTIVATION FOR EXPOSURE

A central component of CBT for health anxiety is exposure. Some clients are reluctant to engage in this aspect of treatment because they are concerned about the temporary increase in anxiety that may accompany exposure. What can the clinician do when faced with this situation? When we are working with a client who is reluctant to engage in exposure, we begin with a careful exploration of the individual's concerns. Common fears are that exposure will result in a permanent exacerbation of the health anxiety problem or that the individual will not be able to cope with a temporary increase in anxiety. Some clients feel they are coping fairly well with their health anxiety and, therefore, do not wish to "rock the boat" by facing feared situations. It is important to establish whether the individual wishes to avoid exposure altogether or whether specific exposure exercises are causing the discomfort.

An obvious approach when a client is struggling with exposure practice is to carefully review the specific assignments and discuss how they could be modified to make them more acceptable and manageable. Exposure works best when the client is involved in selecting exposure

goals and specific homework tasks. Breaking an exposure task down into smaller steps can be helpful in allowing CBT to move forward. For example, if the client and therapist agree that writing an exposure story about fears related to dying of a brain tumor would be helpful, but the client has avoided doing this task for several weeks, it would be appropriate to modify this assignment. The client may find it easier to start with writing an exposure story about having a nonfatal brain tumor or may choose to write a story about a stranger's death from a brain tumor. When these initial stories become less anxiety-provoking, they can be gradually intensified until they incorporate all aspects of the client's worst fears.

It is also important to ensure that clients do not increase their bodily checking, reassurance seeking, or other safety behaviors when they engage in exposure. As discussed earlier (Chapter 7), these behaviors may reduce anxiety initially but in the long run they exacerbate anxiety. Thus, for some individuals, repeated exposure practice will not produce the expected decrease in anxiety because the exposure is not paired with elimination of the safety behaviors. We were puzzled, for example, by the lack of progress reported by one client, Sharon.

*Sharon had been working diligently on various forms of exposure to her worries about breast cancer (including reading stories about women with this disease, watching TV programs about treatment options for breast cancer, and writing narratives about having breast cancer herself and using these stories for repeated and extensive exposure practice). Sharon had been engaging in response prevention and had stopped her daily breast self-examinations. However, she reported ongoing problems with anxiety about breast cancer. Upon further discussion, we realized that Sharon continued to engage in more subtle forms of checking: She would regularly press the sides of her breasts with her upper arms to feel for abnormalities and she was also monitoring the movements of her breasts whenever she walked down the stairs (she believed that uneven movement signaled the presence of a breast lump). When Sharon eliminated these checking behaviors, she found her exposure practice much more productive and reported that her anxiety about breast cancer decreased.*

Some individuals also find that they feel more able to cope with difficult exposure homework when they have well-developed relaxation skills. Ensuring that clients have good strategies to help them manage increased anxiety after they have finished their exposure practice can help some clients complete these assignments more consistently. Such relaxation strategies can include formal techniques such as abdominal breathing or progressive muscle relaxation, or may simply involve pleasurable activities such as going for a walk or reading an engaging book. Some clients who find exposure very stressful report that they feel less

distressed by the exposure assignments when they plan a relaxing activity afterwards. It is important to remember that exposure is likely most effective when the client experiences significant anxiety, so it may be best to encourage the client to use relaxation strategies after they have completed their exposure session.

Ultimately, the client needs to make the decision that exposure is a good treatment choice. The clinician certainly can describe the procedures involved and discuss the advantages of this treatment approach. However, it is important for the clinician to recognize that exposure can be challenging and some clients are not interested in pursuing any treatment that may increase their anxiety, even temporarily. Emphasizing other aspects of CBT or pharmacological approaches may be the best strategy in these circumstances. This does not mean that exposure, or CBT in general, is more difficult to tolerate than other approaches. We do not have empirical information examining dropout rates for the different treatments for health anxiety or the frequency with which difficulties engaging clients in exposure are encountered. Data are available about this issue with other treatment populations, however. Hembree et al. (2003), for example, reviewed 25 controlled studies of CBT for PTSD and concluded that the dropout rate for exposure therapy (20.5%) is no different than for other treatment approaches, including cognitive therapy and stress inoculation training (22.1%), and eye movement desensitization and reprocessing (EMDR; 18.9%). The authors noted that the dropout rate for control treatments (including wait-list, supportive counseling, and relaxation) was lower for this population, at only 11.4%. Finally, we know that many clients with hypochondriasis choose CBT when given information about medication and CBT treatment options (Walker et al., 1999).

## DOES CBT TEACH CLIENTS TO IGNORE PHYSICAL PROBLEMS?

Some clinicians and clients express concern that CBT for health anxiety may teach people to ignore physical symptoms and to never seek medical attention. These individuals worry that reduced vigilance may contribute to delayed diagnoses of serious physical illnesses. These concerns are generally due to a misunderstanding about the goals of treatment. CBT for health anxiety is designed to help clients develop realistic appraisals of their physical symptoms and health risks and to become better consumers of health care services. CBT does *not* encourage clients to ignore their bodies or to avoid medical assessment. In our work with individuals with health anxiety, we take a neutral approach to whether an individual in fact has

a medical disease. We do not see it as our job to convince clients that they are free of disease. In fact, we typically encourage our clients to consider that even if they do not have an illness at present, it is certain that they will have to cope with significant health problems at some time in their lives.

## HIGH DISEASE CONVICTION

Pilowsky (1967) suggested that there were two important factors in hypochondriasis: disease fear and disease conviction. It is generally believed that disease conviction is more resistant to both psychological and pharmacological treatment. Our experience has been that individuals with moderate levels of disease conviction can do very well in treatment. Clearly those with very high levels of disease conviction pose a challenge in treatment. Individuals with high disease conviction are less likely to seek mental health services and may be more focused on seeking further medical assessment to confirm the presence of disease.

We have found that the way in which the treatment for health anxiety is presented can influence whether clients with high disease conviction engage in treatment. If the treatment is described as a method to convince the individual that no disease is present, then treatment is likely to be rejected. If the treatment is presented as a way to assist the individual in coping with difficult symptoms and the stress and anxiety related to them, treatment may be more acceptable. Once again, the neutral stance described earlier fits well here. It is not the job of the mental health clinician to convince clients that they do not have a medical illness. The clinician can help identify coping strategies that are more effective and less effective in managing the health concerns. Thus treatment may focus on the dilemma that the client believes one thing (that they have an illness) and their physician believes another (that they do not have a medical illness). A goal for treatment may be for the client to use the health care system as effectively as possible, to move ahead with life in spite of having health problems, and to deal with health anxiety. If the disease conviction reaches delusional proportions, pharmacological treatment may be very helpful (see Chapter 12).

## HEALTH ANXIETY WITH COMORBID DISORDERS

As discussed in Chapter 1, panic disorder, generalized anxiety disorder, depression, and other disorders frequently accompany worries about health. It is important that the clinician and client make careful decisions

about which problems to address first. A detailed behavioral assessment (see Chapter 5) will provide important information about which behaviors interfere most with daily functioning, which cause the client the most distress, and which will respond most quickly to treatment. The case formulation guides the development of a treatment plan to address the health anxiety and the comorbid disorders.

This is not meant to imply that problems must be addressed sequentially rather than simultaneously. For example, encouraging a client to set short-term goals focusing on increasing pleasure and satisfaction in daily activities will be helpful for addressing problems with depressed mood as well as with health anxiety (see Chapter 11). Similarly, response prevention can be used to address problems with checking and reassurance seeking related to health anxiety as well as for other compulsive behaviors. Providing information about somatic symptoms produced by stress and anxiety will be helpful in increasing the client's ability to cope with a broad variety of somatic symptoms, including those related to panic attacks. It is important to monitor key problems over the course of treatment and to adjust the approach in response to changes in the client's situation. The section on resources for clinicians and clients at the end of the volume provides suggestions for treatment resources for common comorbid conditions.

## PREGNANCY

Pregnancy can pose a challenge for many women. Given the changes that the body goes through during pregnancy, it is reasonable that health worries increase during this time. Bodily symptoms may include nausea, vomiting, fatigue, shortness of breath, increased heart rate, dizziness, headaches, swelling, and back pain. For some women, the experience of these symptoms may result in increased worry about their own health and may also trigger worries about their unborn child.

Fava et al. (1990) and Savron et al. (1989) described a study comparing the illness fears and beliefs of a small sample of pregnant women ($N = 26$) and a matched sample of control subjects. The authors report that the pregnant women endorsed more health anxiety, fear of disease, and disease conviction during each trimester of pregnancy than did the controls. During their third trimester, women also reported increased fear of dying and preoccupation with bodily symptoms. Otchet, Carey, and Adam (1999) evaluated general health and psychological symptoms in a larger sample of women in their third trimester of pregnancy ($N = 393$). These researchers found that the pregnant women reported higher levels

of psychological distress than a community control sample, with higher scores on items assessing somatization, obsessive-compulsive symptoms, and hostility. At postpartum assessment, these women reported significant reductions in level of distress. Kelly, Russo, and Katon (2001) report that women who meet criteria for depressive or anxiety disorders during their pregnancies endorse more somatic symptoms than other pregnant women, suggesting that depression and anxiety may be associated with an amplification of symptoms during pregnancy.

As most women who have been pregnant will attest, worries about the health and well-being of the unborn baby are also exceedingly common. Most women will wonder if their child will be born with all the requisite parts and will experience some concern when they hear about all the things that can go wrong during a pregnancy. Usually these concerns are temporary and manageable, but for some women, the fears become intense and problematic. These women may worry almost continuously about whether their child is alive and healthy and whether things will go wrong later during their pregnancy or during delivery. This may be reflected in excessive monitoring of fetal behavior, including continuous counting of fetal movements. Excessive focus on obtaining information about pregnancy and fetal development through reading, the Internet, or health care providers, is also common. Other women will try to provide an ideal environment for their baby by being extremely careful about what foods they eat and avoiding all possible toxins around them. While these behaviors are certainly desirable in moderation, they can cause enormous stress and distress when taken to the extreme.

Fathers-to-be may also experience these kinds of worries about their unborn babies. There is very little, if any, literature addressing this issue but certainly men can display anxiety, checking, and reassurance-seeking behaviors during their partners' pregnancies.

Pregnancy may also result in increased anxiety regarding death. Impending parenthood often makes people more aware of their own mortality and more concerned about their child becoming an orphan. Some parents become quite focused on this possibility during pregnancy as well as after the birth of their child.

## CBT During Pregnancy

Dealing with health anxiety during pregnancy is not substantially different from health anxiety occurring during other life phases. It is helpful, however, for the clinician to be familiar with the physical symptoms and changes that occur during pregnancy to facilitate normalizing this experience. An important part of treatment will be to help the client develop

a strategy for coping with new or uncomfortable physical symptoms. This may be somewhat different from the approach taken with clients who are not pregnant. For example, we may modify our recommendation of waiting two to three weeks before discussing a new or increased symptom with the family physician. Especially later in pregnancy, a more flexible guideline may be more appropriate and may be more acceptable to both the client and the clinician. When a client is having difficulty coping with physical symptoms during pregnancy, we generally recommend that she have a discussion with her physician to develop guidelines for when she should contact the physician. The mental health professional may be involved in this process or at least will be able to support the recommendations developed.

Response prevention for excessive checking and reassurance seeking is appropriate and helpful during pregnancy. Reducing bodily checking and reassurance seeking within the guidelines developed in consultation with the physician is generally very useful. There may be some situations when a client is encouraged to engage in careful monitoring of certain symptoms by the obstetrician. Obviously, these behaviors would not be targets for response prevention unless they clearly exceed what is recommended by the physician. However, behaviors such as monitoring one's heart rate thirty times per day serve no more useful purpose during pregnancy than at other times and in both cases result in increased anxiety.

Cognitive reappraisal strategies, relaxation techniques, and increasing enjoyment of life are all appropriate for use during pregnancy and do not require special modification. These approaches help the client adjust to the challenges of pregnancy and the arrival of the baby.

Exposure to death and illness-related situations (as described in Chapter 8) is also an important strategy when health anxiety occurs during the course of pregnancy. In vivo and imaginal exposure to feared situations related to health and pregnancy are useful and effective treatment approaches. Imaginal exposure to bodily symptoms, using narratives to describe the feared symptoms, is appropriate for use during pregnancy. Some forms of in vivo exposure to feared bodily symptoms are also appropriate. Learning to cope with bodily symptoms during healthy activities, such as exposure to increased heart rate during exercise, is an important part of treatment. Other forms of interoceptive exposure are not appropriate during pregnancy. Deliberate hyperventilation or sitting in a hot tub, for example, are not recommended.

We are not aware of any studies of treatment for health anxiety during pregnancy. The modest literature evaluating the effectiveness of CBT during pregnancy for panic disorder (e.g., Robinson, Walker, & Anderson, 1992)

suggests that this would likely be a viable treatment option for health anxiety as well. Clearly there is a need for research examining treatment of health anxiety during pregnancy.

### Pharmacotherapy During Pregnancy

Some women and their physicians choose to initiate or continue medication treatment for health anxiety during pregnancy. Others are concerned about possible effects upon the child and choose not to do so. The literature examining various pharmacological treatments for anxiety and depression during pregnancy is somewhat divided. There are concerns about the impact of some medications on the developing fetus but there is also concern about the impact of untreated anxiety and depressive disorders on the fetus (e.g., Altshuler, Hendrick, & Cohen, 1998; Cohen & Rosenbaum, 1998; Rubinchik, Kablinger, & Gardner, 2005). It is our view that it is important for the clinician to support the client's treatment preferences and to do everything possible to make treatment choices available during this important time.

## TREATMENT IS NOT OVER WHEN THERAPY STOPS

As clients have been working through the CBT program, they will develop a good understanding of health anxiety and how this problem develops and is maintained. There is usually progress in reducing patterns of avoidance, checking, reassurance seeking, hypervigilence, and catastrophic thinking with corresponding decreases in worry and other forms of anxiety. For most people, however, the work is not over with the end of formal treatment. There will likely be some remaining areas of avoidance and discomfort that should be addressed and continued work focused on positive goals and maintaining a healthy lifestyle. Health problems and death-related experiences are a normal part of life and will present challenges when they arise. Long-term progress depends in part on how clients continue to apply what they have learned. It is important to discuss this issue before treatment ends so that the individual is well prepared and motivated to continue the work of treatment more independently.

## Coping with Setbacks

Most clients being treated for health anxiety will experience setbacks, either during treatment or after termination. We define a *setback* as a time when the client experiences a significant increase in anxiety or worry after making progress in overcoming the problem. Understandably, most clients find setbacks upsetting. They may lose confidence in the strategies they have learned and feel that their hard work in treatment was for nothing. Some clients may feel that they must find a completely different way to deal with the problem. Others feel very discouraged and fear that nothing will ever help them overcome their health anxiety. Handout 13.1 provides brief information for clients when dealing with plateaus in recovery and setbacks.

Several strategies are helpful in preparing for and coping with setbacks. First, informing clients that setbacks are common make them less upsetting when they occur. When there is a significant increase in anxiety we encourage the individual to analyze the factors that seem related to the setback. This can give them a greater understanding of their anxiety. Situations commonly related to setbacks include:

- Experiencing a new physical symptom or the return of physical symptoms previously experienced
- Facing a situation related to illness worries that has been avoided for a long time
- Experiencing a serious illness, either for the client or a loved one
- Losing a significant relationship, through death, life changes, moves to other cities, etc.
- Experiencing a threat to an important relationship (e.g., marital conflict)
- Dealing with increased life stress

We encourage clients to recognize that life changes and increased stress may be *consequences* of progress they have made in treatment. With movement towards goals, clients may become involved in family, work, social, and educational demands they would never have considered before. It may take some time to become comfortable with these new roles and responsibilities.

**Handout 13.1.** Coping with setbacks and plateaus in recovery.

### Coping with Setbacks

Some people hope to never have worries about health and illness. It is better to expect that there will be many times in your life when you will need to deal with illness and death: you will become sick, family members and friends will have illnesses, loved ones will die. Sickness and death are a normal part of life. It is normal to think about these issues and to be upset when you are facing illness or death. The difference between having occasional worries and fears in difficult circumstances and having a problem with health anxiety is knowing how to cope with your fears. Thoughts about illness and death do not have to cause a major disruption in your life. Thinking about these issues in a constructive way is part of having a healthy approach to life.

### Coping with Plateaus in Recovery

We have found that many people make good progress with CBT but find it difficult to continue to work toward a completely normal, healthy lifestyle after therapy sessions are over. One way to describe this is to say that you reach a *plateau* in recovery. When you are feeling much better, there is not much pressure to keep working at remaining problems. You may even avoid further work because you know that reducing avoidance and facing difficult problems will result in additional anxiety in the short term.

A plateau may be comfortable for many months or years. You have achieved a lot and your life is more comfortable and less constricted than it was. In a lot of ways, you may feel very free of anxiety. However, if you suddenly encounter a new challenge or demand, you may experience considerable anxiety. For example, most people find that as the years go on, they experience more physical symptoms. Similarly, you will likely have some significant illnesses at some point during your life, and you will have to cope with illness and death of family members and loved ones.

### Continuing your Progress

It is easy to misinterpret the increase in your worry and fear in these situations as the return of your problem. Typically, in these situations, people make progress again by applying the coping strategies they learned while working on the program. However, they usually wish that they had continued to work on overcoming the problem immediately after they completed the program.

The best way to ensure continued progress in meeting your goals is to continue to apply what you have learned. And it is easiest to do right at the end of the program while you are still familiar the ideas and coping strategies you have learned. It is tempting to want to take a "therapy holiday" after a period of hard work, but long-term progress requires that you keep working and looking for new challenges to conquer.

Here are some useful tips to remember when you are dealing with a setback or a plateau:

- Remind yourself that setbacks are a natural part of recovery
- Try to identify situations or triggers for your setback
- Keep working towards your goals
- Continue the exposure exercises
- Go back to an easier goal to help you get back on track
- Practice your coping strategies
- Cut back on bodily checking and reassurance-seeking
- Improve your social supports
- Consider getting booster therapy sessions

We recommend to our clients that they keep up their routine and continue their work towards their goals after the setback, so they will not lose the gains they had made previously. If the person is feeling very overwhelmed with the continued work on goals, we may suggest a return to a slightly easier goal for a brief period of time to facilitate getting back on track. The client will likely find that persistence with regular exposure homework will quickly result in further progress.

A setback also serves as a reminder to review coping strategies. Over time, some coping strategies fall by the wayside. We ask questions such as, "Are you out of practice in using some of your coping strategies? Are there some additional strategies that would be helpful now? Have you returned to some unhealthy habits such as excessive checking or reassurance seeking? Have you been caught up in catastrophic thinking or excessive attention to symptoms?" We encourage clients to return to coping strategies that were previously helpful.

If the individual is having difficulty overcoming the setback, we recommend that they get additional support. This is particularly relevant if the individual is no longer in active treatment. The support could come in the form of booster sessions with a clinician or treatment group they had worked with before. A setback is also a good time for people to ensure that they have, if possible, solid support from family and friends.

## CONCLUSION

Treatment of individuals with health anxiety can be challenging, especially in special circumstances such as when encountering setbacks in treatment or when the client has limited motivation to engage in exposure, one of the central components of CBT. Working with clients with significant disease conviction, those with comorbid problems such as depression or panic disorder, and pregnant women present unique challenges. There are doubtless numerous other special challenges in working with health anxiety that clinicians have encountered. Perhaps we can include these in the second edition of this book!

CHAPTER 14

# HEALTH ANXIETY AND SOMATIZATION IN CHILDREN

## SOMATIC SYMPTOMS

Somatic symptoms are common during childhood and adolescence. Parents and teachers are familiar with how frequently children report stomach aches and other symptoms when they are facing difficult situations. Some children and families handle these symptoms easily and they do not interfere with normal activities. For other children, these symptoms are very persistent and cause difficulty in everyday routines.

As with adults, the prevalence of somatic symptoms that may cause distress and disability is considerably higher than the rates of full-blown disorder. There have been few studies describing the extent of problems with children's somatic symptoms outside medical settings. One of the only studies of a preschool community sample (ages 3–5) was carried out in Spain (Domenech-Llaberia et al., 2004). Public and private nurseries in one urban and one rural district were recruited for the study. Parents of all children who attended the nurseries were asked to complete a survey describing the frequency of five somatic complaints for their children in the previous two weeks. Among the 807 respondents, the following proportions had complained about symptoms at least twice in the previous 2 weeks: stomach ache 19.9%, leg pain 9.7%, headache 7.5%, tiredness 13.7%, and dizziness 0.8%. The authors then considered subgroups with

frequent complaints (four or more complaints of symptoms, 20.4% of the children) and with no complaints (44% of children). Children in the Frequent Complaints group had higher rates of absence from school and more frequent pediatric clinic attendance. They also had more frequent parental ratings of general anxiety in the clinical range, adjustment problems, feeding problems, and attentional problems. These children also more often had a mother who reported levels of psychological distress above clinical cut-offs (36% vs. 15% in the No Complaints group) and a relative with a chronic illness (23% vs. 11%). The findings even at this young age are broadly consistent with findings concerning somatic symptoms with older children and adults.

The Great Smoky Mountains Study included a random community sample of 3,733 youth aged 9, 11, and 13 years in western North Carolina (Egger, Costello, Erkanli, & Angold, 1999). Children participated in a structured psychiatric interview describing experiences during the previous 3 months. The section of the interview on somatization included items relating to headaches, stomach aches, and musculoskeletal pains. The criteria for presence of these problems were conservative relative to other studies. The authors indicate that:

> Headaches and stomach aches were coded as present if they lasted for at least 1 hour and occurred at least once a week during the preceding 3 months. For children who met either of these criteria, headache or stomach ache frequency and duration were assessed. Our frequency threshold of "at least once a week for 3 months" effectively excluded reports of monthly premenstrual or menstrual pains. Musculoskeletal pains were coded as present if they occurred at least three times per week during the preceding 3 months. Musculoskeletal pains resulting from involvement in sports were not included (p. 854).

Using these criteria, the prevalence of muscle and joint pain was 2.2% (with no differences by age or sex). Stomach aches had a prevalence of 3.8% in females and 1.9% in males, and headaches had a prevalence of 10.3% with similar levels in males and females (Egger, Angold, & Costello, 1998).

The Early Developmental Stages of Psychopathology Study of 3,021 respondents aged 14–24 in Munich, Germany, found that the 12-month prevalence of full-blown DSM-IV somatoform disorders in adolescents and young adults was lower than the rate of anxiety disorders and depression (Lieb, Pfister, Mastaler, & Wittchen, 2000). The rate of abridged somatization disorder was 1.4%. This category (described in Chapter 1) requires four somatic symptoms for males and six symptoms for females from a list of 38 symptoms. Somatoform pain disorder was found in 0.9%, and

conversion disorder in 0.2%. Only one case of hypochondriasis was identified in this large sample. This study used the term *undifferentiated somatoform syndrome* when the individual reported at least one clinically significant somatic symptom with a minimum duration of 6 months and at least significant impairment during this period. A striking proportion of young people (5.1%) met the criteria for the presence of this syndrome in the previous 12 months. All the disorders were more common in females. The majority of respondents with pain disorder, abridged somatization disorder, and undifferentiated somatoform syndrome reported an onset of symptoms in childhood or early adolescence.

A longitudinal community study in the Netherlands considered whether self-reported somatic symptoms at ages 12–16 predicted symptoms at age 18–24 (Dhossche, Ferdinande, van der Ende, & Verhulst, 2001). As in other studies, the occurrence of somatic symptoms was very common at both age levels. The presence of a symptom during adolescence was associated with an increased risk of the same symptom and multiple symptoms during young adult years.

## HEALTH ANXIETY

While there are a number of studies of somatic symptoms in childhood and adolescence, there is very little information on health anxiety in this age group. Preliminary findings in a community sample of students in the public school system ($N$ = 245, ages 9–11) suggest that health anxiety is common among children at this age (Walker, Feldgaier, Furer, Warren, & Williams, in preparation). As part of a package of questionnaires concerning anxiety problems, all the students in a fourth grade completed a one-page questionnaire describing ten common physical symptoms and nine items concerning health anxiety. We provided the following instructions: "Below is a list of symptoms that young people commonly experience. How much has each of these symptoms bothered you?" Response alternatives were: "Not at all," "a little bit," "moderately," "quite a bit," and "extremely." Table 14.1 shows the proportion of students indicating that symptoms bothered them "extremely" or "quite a bit" for seven somatic symptoms and three common health problems at this age range. As is the case in other samples at this age, distress related to somatic symptoms was common. Headaches (18.5%), stomach aches or cramps (17.4%), other aches and pains (17.3%), nausea (12.6%), and faintness or dizziness (9.7%) were much more common than health problems frequently seen in children such as asthma (6.4%), food allergies (2.5%), and other allergies (6%). Table 14.2 shows the proportion of students indicating they were

**Table 14.1.** Percentage of students ($n$ = 245) reporting distress related to physical symptoms

| | Bothered extremely (%) | Bothered quite a bit (%) |
|---|---|---|
| Symptom | | |
| Headaches | 6.3 | 12.2 |
| Stomach aches or cramps | 7.2 | 10.2 |
| Other aches and pains | 5.5 | 11.8 |
| Nausea, feeling sick | 4.2 | 8.4 |
| Constipation | 1.7 | 1.3 |
| Diarrhea | 2.6 | 1.3 |
| Faintness or dizziness | 5.5 | 4.2 |
| Asthma | 2.1 | 4.3 |
| Food allergies | 1.7 | 0.8 |
| Other allergies | 2.6 | 3.4 |

**Table 14.2.** Percentage of students ($N$ = 245) reporting health anxiety

| | Bothered extremely (%) | Bothered quite a bit (%) |
|---|---|---|
| Health anxiety item | | |
| Worries about your health | 8.1 | 5.1 |
| Worries about throwing up | 5.6 | 3.8 |
| Worries about getting sick (cold/flu) | 6.4 | 3.4 |
| Worries about the health of family members | 17.6 | 11.2 |
| Worries about dying | 20.5 | 4.7 |
| Worries about a family member dying | 29.9 | 10.3 |
| Getting upset when you are feeling ill | 11.0 | 8.0 |
| Getting upset when you are physically hurt | 11.9 | 10.6 |
| Feeling upset when you hear about someone with a serious illness or injury | 23.0 | 14.5 |

bothered "extremely" or "quite a bit" by concerns about their own health and the health of family members. A large proportion of the children indicated they were bothered by these concerns, especially concerns about death of a family member (40.2%), health of family member (28.8%), their own death (25.2%), or their own health (13.2%).

There has been very little research on the assessment of health anxiety in children and adolescents. The development of a new scale, the Childhood Illness Attitude Scales (Wright & Asmundson, 2003, 2005), based on the widely used adult measure, the Illness Attitudes Scales (Kellner, 1987), will be helpful in facilitating research in this area. There are a number of measures of somatization in children and adolescents.

The most widely used measure, the Children's Somatization Inventory (Walker, Garber, & Green, 1991), has been evaluated in several community studies and found to have satisfactory psychometric properties (e.g., Meesters, Muris, Ghys, Reumerman, & Rooijmans, 2003). These scales have been developed for research purposes but have yet to be widely used in clinical practice.

## TREATMENT RESEARCH

There has been little research on treatment of somatization and health anxiety in children. Several areas have been the focus of research attention. Blanchard and Scharff (2002) reviewed the assessment and treatment of recurrent abdominal pain in children. They note that while there are few published studies in this area, preliminary support seems to be strongest for cognitive behavior therapy. The largest treatment study in this area was published by Sanders, Shepherd, Cleghorn, and Woolford (1994). Forty-four children aged 7–14 with recurrent abdominal pain were randomly allocated to either CBT family intervention or standard pediatric care. The CBT Family intervention was relatively brief, with six 1-hour sessions. Both interventions resulted in significant improvement but a higher proportion of children receiving the CBT Family intervention reported complete elimination of pain at post-assessment (56% in CBT, 24% in Standard Care) and at 12-month follow-up (59% in CBT, 37% in Standard Care). Children and parents in the CBT Family program also rated pain as interfering less with daily activity at 12-month follow-up than did those in Standard Care.

Ball, Shapiro, Monheim, and Weydert (2003) describe an open trial of a brief intervention (four 50-min sessions) for recurrent abdominal pain involving relaxation and guided imagery. The ten children showed a 67% reduction in days with abdominal pain following treatment. Chalder, Tong, and Deary (2002) describe an open trial of family CBT for children with chronic fatigue syndrome. Of those who completed treatment and follow-up (18 of 23 families), 83% met criteria for clinically significant improvement.

Given the limited research in this area, clinicians often rely on management suggestions based on clinical experience rather than on research. Campo and Fritz (2001) make practical recommendations for management of functional somatic symptoms in children and adolescents. They suggest the following principles for assessment:

- Acknowledge patient suffering and family concerns
- Explore prior assessment and treatment experiences
- Investigate patient and family fears provoked by the symptoms

- Consider the presence of comorbid anxiety or depressive disorders
- Remain alert to the possibility of unrecognized physical disease and communicate an unwillingness to prejudge the etiology of the symptoms
- Avoid excess and unnecessary tests and procedures
- Avoid diagnosis by exclusion
- Explore symptom timing, context, and characteristics
- State the diagnostic impression clearly and directly

In discussing treatment approaches, Campo and Fritz (2001) suggest a focus on functional improvement rather than cure. Generally, it is helpful to address the anxiety the family and patient may feel about the symptoms and to clear up any unrealistic beliefs concerning the problem. Cognitive behavioral approaches that involve the family and the child, and focus on a return to normal functioning (a rehabilitative approach), hold the most promise in terms of treatment effectiveness. Pharmacological treatments are also worth considering, particularly if there are also problems with depression and anxiety. In approaching these problems, it is important to have clear communication and coordination among health service providers, the family, and the school system.

While we were able to find no treatment research focusing on health anxiety, the research on treatment of children's anxiety as well as on treatment of health anxiety and hypochondriasis in adults is helpful in formulating practical approaches for children.

## CASE EXAMPLES

Health anxiety presents in many different forms in children and adolescents. Perhaps the best way to illustrate treatment is with some examples from our clinic. The approach is similar to that for adults described in the previous chapters. Later we will discuss the adjustments that are helpful with children and families.

### MELODY: TERRIFIED OF DEATH

*Melody's parents brought her to the clinic at age 12 because they were very concerned about her fears of developing cancer or heart disease and dying as a result. Episodes of anxiety were triggered by both external cues (e.g., seeing an ambulance drive by), and by internal cues (e.g., uncomfortable bodily sensations). A headache would lead her to worry about having a brain tumor, and tightness in her chest would leave her terrified of having a heart attack. These difficulties interfered significantly with her functioning. She sought reassurance from her parents 10–20 times daily and reported frequent periods of anxiety*

*through the day. Her fears were long-standing, although they had gradually increased in severity over the years. Her mother recalled that Melody had always experienced physical symptoms (such as stomach aches) in response to stress, and had always been very conscientious and concerned about making mistakes. Increases in health anxiety over the years were associated with the occurrence of a number of health-related stressors. When Melody was five years old, her mother began to experience gastrointestinal problems that left her quite ill and fatigued for about 2 years. Melody expressed fears that her mother might die. In the year prior to coming for treatment, Melody's classmate required surgery for a brain tumor. After this her worries about cancer were more intense. Melody reported a number of other fears, such as being kidnapped or robbed, her parents being hurt or killed, and failing exams. In spite of the difficulties with anxiety, Melody was an honor roll student and was actively involved in sports and social relationships.*

The problems described by Melody and her parents met the criteria for both hypochondriasis and generalized anxiety disorder. After the initial family session, the sessions were structured so that Melody spent the first 45 minutes with the therapist. Her parents joined the session for the last 15 minutes and the therapist reviewed the material covered that day and how her parents could support her work on the program. Work on exposure began during the third session. Through the use of illustrative examples, several key ideas were regularly reviewed and related to Melody's difficulties with anxiety. The therapist described how avoidance, distraction, and reassurance seeking gave fears more power. In contrast, facing her fears gradually and in a controlled manner would reduce them. It was emphasized that Melody need not do anything in particular to feel less anxious; rather, her body would automatically calm down if she delayed the urge to seek reassurance or to distract herself from her uncomfortable body sensations. Melody initially reported some reluctance to complete exposure exercises, but was willing to give them a try. During the first exposure session, Melody, with the help of her therapist, wrote the following story illustrating her worst fear:

*It's dark and I am in bed for the night. I am watching TV and I start to notice weird feelings.... I feel a huge gust of air going up, it's almost too much air and it feels hard to breathe. I think that I am going to have a heart attack and die. I feel tightness and pressure in my chest and neck. The TV seems blurry, I can't see it very well. I start to have even more trouble breathing, the gusts of air get more and more. I call for my Dad. It's hard to get my voice to work but I call for him. He comes running and tries to help. He tries to tell me to relax but the breathing is still bad and the tightness is getting worse. I can only sort of hear what he is saying to me. Eventually I can't breathe at all. My dad calls the ambulance but it's too late because I am dead.*

Melody was initially fearful that writing the narrative would be too difficult or overwhelming and experienced considerable anxiety as she composed the story. Reviewing it several times over the course of the session significantly reduced her anxiety. Melody was asked to take 20–30 minutes each day to read the story, to imagine the events as vividly as possible, and to notice her feelings and how they changed over time while she did this. The therapist explained the rationale for exposure therapy to Melody's mother and instructed her not to reassure her daughter, but rather to respond to her daughter's anxiety by expressing confidence in Melody's ability to cope. At the next session, Melody reported she had been surprised to notice that after only three days of practice, the story no longer elicited anxiety. She was pleased with her success, and was now more motivated to attempt other exposure activities. The remaining treatment sessions emphasized increased practice with exposure, including reading a magazine story about meningitis, sitting in the local hospital's emergency department, inducing breathlessness, looking at photographs of skin tumors, and watching a segment of a popular television show in which a character suddenly suffers convulsions and loses consciousness. We asked her not to distract herself or seek reassurance when experiencing uncomfortable bodily sensations, but rather to focus on those sensations, and to acknowledge her anxiety by saying things to herself like, "this feels funny and I'm feeling nervous, but I know these feelings will go away," or "feeling anxious does not mean that I am sick."

Melody's mother was initially concerned that facing situations related to illness and death would leave Melody feeling more worried and anxious. Her father was more comfortable with the logic of the approach. The therapist pointed out that illness and death are a normal part of a young person's experience (a classmate with a brain tumor, a death in a friend's family, and depictions of illness and death in the media). Children are more able to cope with these normal experiences when they are supported in facing their emotions and their fears. The therapist also enlisted the parents' help by asking them to notice when she asked for reassurance about her health. They were encouraged to respond to questions about whether she was ill with neutral remarks such as "what do you think?" As the treatment continued, Melody's parents were very positive in their response to her work on homework assignments. The treatment was completed after two assessment and six treatment sessions. Melody reported that she was no longer experiencing unusual levels of health anxiety and this progress was maintained at 3-month follow-up. (We would like to thank Adrienne Eastwood, Ph.D. for sharing this case description from her work with our team.)

## Connor: What if I Throw Up?

*Connor, age eight, was referred because he had not been attending school for almost five weeks. We were concerned about this absence from school so we arranged a home visit shortly after the referral was received. A review of the history with his mother indicated that near the time of onset, there were two experiences that were difficult for Connor. He dropped a flowerpot on his foot and his mother thought he might have broken his toe. After a five-hour visit to the emergency department, it was determined that his toe was not broken. About a week later, he was at a friend's birthday party and he threw up. He was quite embarrassed about this and afterward found that he often felt nauseated when eating in front of other people, when going to school, and eventually whenever leaving the family home. Each time his parents suggested that he go out, including to go to school, he would become very upset and would protest loudly, refuse to leave his room, and cry. He told his parents he was very worried that if he was around anyone who was ill, he would become sick himself and throw up. More detailed exploration of his experiences revealed that his stomach would feel uneasy if there were plans to go out and he worried that he might throw up and embarrass himself. This situation was dramatically different from his previous pattern of behavior when he had had a good circle of friends and enjoyed school and going out with family.*

The difficulties Connor was experiencing met the criteria for agoraphobia without a history of panic attacks. The most prominent symptom was stomach distress and he did not report other symptoms that would meet the criteria for a panic attack. Health anxiety was a prominent factor here because the main fear was that he would vomit. The family situation was complicated by another factor. His mother had been off work for about a year due to depression and was just starting to return to work about the time of the onset of this problem. She had interrupted her plans to return to work and had taken a leave of absence so she could stay home with her son until he was able to attend school. The therapist became concerned about this when she found that Connor's mother had not made plans for childcare for Connor and his sister over their summer holidays. We encouraged her to separate the issue of her return to work from Connor's difficulties by arranging appropriate child care for the summer months that could also be used if there were times when Connor was not able to attend school. Connor's mother had expected an extensive period of work on procedures to reduce anxiety (such as relaxation training), but we decided to move quickly to a focus on a strategy that involved graduated exposure to feared situations.

Connor and his mother developed a plan to go out for walks three times a day, gradually increasing the distance from home. The therapist

worked with the parent to prepare a chart to keep track of practice and small rewards that appealed to Connor (sports cards) for completing a certain number of practice steps. With consistent practice, Connor went through a number of steps quite quickly: walks of gradually increasing distance, drives to his grandmother's house but staying in the car, visiting his grandmother's home and staying for increasing periods of time, visiting other family members, going to the school playground on the weekend, going into the school with a parent and going home after a short visit, spending longer times in the resource room at school, then going into the classroom for gradually increasing periods of time. Given his concern about throwing up, arrangements were made that if he was feeling nauseated in the classroom, he could leave the room if he wished and spend some time in the resource room with some space to have privacy and throw up if he needed to. Rather than treating throwing up as a catastrophe, we emphasized that this is something that happens to everyone at times. Throughout treatment we focused on accepting nervous feelings. We suggested that a "nervous stomach" was normal when doing something that was difficult and that in most cases this nervous stomach would not result in vomiting. We also emphasized that vomiting is a normal reaction when people have the flu or when they have eaten food that is spoiled or that disagrees with their stomach. At these times, vomiting is something the body does to take care of itself. It is best to allow time for the stomach discomfort to pass and then return to normal activities. We recommended that if a parent was called to school when Connor was feeling unwell, it would be best to spend time with him at school rather than taking him home. The parents and school were very supportive of this plan and within three weeks Connor was attending class regularly. Since the treatment was completed just before summer break, we also made plans for Connor and a parent to visit the school several times before the start of the school year in the fall. While the treatment used in this situation was typical of CBT for agoraphobia and school refusal, it was important to include aspects of treatment that dealt with the fear of vomiting.

## SPECIAL CONSIDERATIONS IN ASSESSMENT AND TREATMENT OF CHILDREN AND ADOLESCENTS

The approaches used in the assessment and treatment of health anxiety and somatization in children are similar to approaches used for adults with adjustments for the developmental stage of the young person. Several principles are particularly important for children and adolescents.

**Family involvement:** The first principle is the importance of involving the family in the assessment and treatment phases. Part of the assessment should involve a consideration of the overall family situation and how this may influence the child's experiences. It is also important to consider how the parents understand and manage the young person's symptoms and response to the symptoms. In the case of younger children, the main focus may be to intervene with parents to help them work with their child to resolve the problem. Melody's mother was clearly somewhat reluctant about the exposure approach and it was important to help her to understand the program so that she could encourage her daughter's involvement. There are excellent resources available for parents to help their children cope with anxiety and these may be used to assist with treatment (Manassis, 1996; Rapee, Spence, Cobham, & Wignall, 2000).

**School involvement:** The second principle is the importance of including school or childcare staff in treatment planning. Their cooperation is essential in developing plans that can be implemented successfully. If there is a health problem seen at the school (e.g., migraine headaches, dizzy spells), it is important the school be fully informed and a plan developed for how the staff can manage problems that are likely to arise. Related to this is the importance of assisting the child or adolescent to be involved in a normal school program. Problems with health anxiety and somatization are often a factor in school refusal (Egger, Costello, & Angold, 2003). Research on school refusal (e.g., Kearney, 2001) suggests that the longer a child is away from a normal school program, the more difficult it is to get them back again. It is, therefore, a high priority to help the child and family to return to a normal school routine as soon as possible. The approaches developed in treating school refusal (Heyne & Rollings, 2002; Kearney, 2001) may be very helpful for children who avoid school due to health anxiety.

**How sick is sick enough to stay home or to leave school?** One dilemma that many parents have faced (including the authors of this book) is when to allow a child to stay home from school as it is difficult to know just how ill a child is feeling. While many parents develop guidelines regarding this issue, some children will test the rules. They may regularly experience the symptoms needed to obtain parental permission to stay home. Staying home may be more interesting and fun than going to school. In Connor's case (described above), he slept late in the morning, spent a lot of extra time playing games with his mother, and also had more time watching TV when he was home from school.

Rather than engaging in debates about "Are you sick enough to stay home from school?" a helpful approach is to establish a routine in the

home for sick days. So, if children are ill, it is appropriate for them to rest quietly in their bedrooms. We discourage the use of TV during school hours and the practice of watching more television on out-of-school days than on school days. (Some children sleep late on these days and then watch extra television in the evenings.) In order for a child to pass the time on a sick day, we encourage reading or doing homework. Evening activities or visits from friends may be cancelled on days when a child is not in school and reinstated when the child is back in school. (These rules can be adjusted for the child who is away from school for a significant time. In these cases it may be desirable to encourage social activities.) The kind of *sick day* routine described above is not meant as a punishment for staying home, but, rather, it describes a reasonable routine that could be followed if a child were away from school with a bad cold. When these family rules and routines are established, it is important to communicate them to others who will be providing childcare and to the school if they are required to be part of the program.

One of the authors had a child who, at one stage of development, was quite capable of vomiting in the morning if this was the criterion for staying home. Once a reasonable routine for out-of-school days was established, it got the parents out of the bind of establishing "Are you sick enough to stay home?" The youngster knew the rules for sick days and was able to establish whether she felt badly enough to stay home from school, without having to prove to parents that she was "sick enough." Arrangements were made so that missed school assignments were made up on other days rather than avoided.

**Waiting for specialist visits or medical tests.** Occasionally a family may be waiting for specific consultations or tests in order to have a better understanding of a health problem. The family may take the approach of suspending normal behavioral expectations while waiting for more information. This may cause difficulty over time with getting back to normal routines. It is best to encourage the child and family to have as normal a routine and school attendance as possible during these periods. Even children with very serious health problems tend to do better if they continue to be involved in normal activities.

**Modeling healthy behavior in the family.** Children learn to deal with common health problems through experiences in the family. Parents teach children how to care for common health problems (headaches, stomach aches, colds, flu) through their examples and their assistance to the child. Some approaches encourage age-appropriate self-reliance and confidence (teaching a child self-care skills and how to deal with common problems in a relaxed way), while others may feed into problems with worrying or excessive dependence. It is important for children to learn

that experiencing a variety of aches, pains, and illnesses is normal. They should have the opportunity to ask questions and express their concerns about these symptoms. We encourage parents to use health problems as opportunities to teach children self-care skills.

Children will also be exposed to more serious health-related events in the context of the family. We also encourage parents to include children in age-appropriate discussions about family and community events related to illness and death. It is helpful for children to be able to ask questions, express their concerns, and describe their emotions (including fear and sadness) in dealing with these situations. The death of a pet, a relative, or a family friend is an opportunity for a young person to develop a realistic understanding of illness and death. At these times it is also important for parents to model healthy behavior in facing these concerns and going on with normal family activities. We encourage parents to include children in family events such as hospital visits and funerals as soon as they are old enough to understand the situation and to ask questions. We also encourage parents to discuss the emotional impact of these events realistically without glossing them over and without denying feelings of sadness or worry.

## CONCLUSION

There is much less research available on assessment and treatment of somatization and health anxiety during the child and adolescent years than during adulthood. Clearly, somatization and health anxiety are common concerns during this phase of life. Fortunately, the approaches that have been found to be helpful during the adult years appear to be effective during childhood when appropriate adjustments are made for developmental level. A great deal of work remains to be done on evaluating these treatments and making them widely available.

CHAPTER 15

# HEALTH ANXIETY IN ILLNESS AND AGING

## MEDICAL ILLNESS

It is not surprising to find that levels of health anxiety are higher in people dealing with threats to their health or serious illness. For example, a large epidemiological study of the general population in Germany, which included an assessment of health problems by a physician (Jacobi et al., 2004), indicated that poor health status was strongly associated with anxiety, depressive, and somatoform disorders. Studies in North America also indicate that the presence of a chronic medical condition is associated with higher rates of anxiety, mood, and substance disorders (Katon & Ciechanoswki, 2002; Patten et al., 2005). Consequently, the rates of these disorders are higher in health care settings than in the general population. Further, a great deal of the disability and functional impairment associated with chronic health problems may be related to comorbidity with psychiatric disorders (Buist-Bouwman, de Graaf, Vollebergh, & Ormel, 2005; Kessler, Ormel, Demler, & Stang, 2003).

The relationship between health status and anxiety can be illustrated with a description of inflammatory bowel disease (IBD), a chronic medical illness. IBD is marked by a fluctuating course of symptoms related to the inflammatory disease process. Unpleasant medical investigations (e.g., colonoscopy) and surgical procedures (e.g., bowel resection) are

often required. In a clinical sample of IBD patients followed over 6 months, Porcelli, Leoci, and Guera (1996) found that increase in disease activity was accompanied by a large increase in anxiety symptoms, decrease in disease activity was accompanied by a large reduction in anxiety, and ongoing disease activity was accompanied by stable levels of anxiety. A similar pattern was seen for symptoms of depression, although the magnitude of change was less. In a community study of almost 400 persons with IBD, our group considered differences between those with active and inactive disease on a wide range of measures of positive and negative psychological functioning (Graff et al., in press). The factor that differentiated most strongly between those people with active and inactive disease was health anxiety. Heightened health anxiety can contribute to poor coping with illness (Hadjistavropoulos et al., 2001). In studies of quality of life in patients with IBD, psychological distress has been found to be a predictor of reduced health-related quality of life, independent of the relationship between quality of life and disease severity (Guthrie et al., 2002).

While clinicians may feel comfortable dealing with health anxiety in healthy young people, they may be less familiar and less comfortable in dealing with patients with serious health threats, illness, and risk of death. As we will illustrate below, the treatment approaches described in this volume are also helpful in these situations. These approaches are generally well accepted by patients and family members when they are introduced in the context of a supportive relationship and a comprehensive approach to treatment.

## AGING

In a primary care sample, Barsky, Frank, Cleary, Wyshak, and Klerman (1991) found that frequency of DSM-III-R hypochondriasis and pattern of somatic concerns was similar in patients under and over age 65. A study of somatization among primary care attenders over 65 found that somatization was common and stable over a 10-month period (Sheehan, Bass, Briggs, & Jacoby, 2003). High rates of primary care utilization were associated with higher somatization and low social support. Community studies indicate that functional somatic symptoms and worries about health are more common among those who are over 45 (Rief et al., 2001). Studies of worry among individuals in different age groups indicate that older people worry less in general than younger people. However, worry about health is common among older respondents (Hunt, Wisocki, & Yanko, 2003). In old age, many of the health problems that are a concern

to younger people (such as cancer and heart disease) become much more common. Older adults frequently have to deal with serious illness among family members and friends. At this point in life, people may have had more previous experiences with medical illness and treatment, and some of these experiences may have been quite negative. Some of the concerns we commonly note with older clients are:

- As I get older, will I develop problems with serious memory loss or dementia?
- If I become ill, will I be a burden on my family?
- Will I become seriously disabled and dependent on others?
- Will there be someone in my life to support and advocate for me?
- If I become ill, will I lose control of my life?
- Will I be able to cope if my partner or another family member or friend becomes ill?
- If I lose my partner, how will I cope?
- As I grow older will I be isolated and alone?

A problem-solving approach can be helpful in dealing with these concerns (Nezu, Nezu, Felgoise, McClure, & Houts, 2003; Nezu, Palmatier, & Nezu, 2004). There are actions people can take in advance to make it more likely they will be able to cope with the challenges that come with increasing age:

- Using advance health care directives to inform others of preferences concerning health care in case of severe illness
- Keeping up social contacts and broadening the social network to allow for better adjustment if there are losses within close relationships
- Resolving interpersonal problems that may have developed over the years if the relationships are particularly important (e.g., family members and friends)
- Developing skills for independence (e.g., ability to travel independently, manage finances, maintain social life) in case of the loss of a partner
- Developing interests and satisfying activities that fit with changes in health status
- Arranging a living situation (e.g., housing, availability of social supports) that will work well if health problems develop in the future

The approaches to treatment described earlier in this book may be applied to those clients who are dealing with advancing age (Monopoli, 2005; Snyder & Stanley, 2001). While we are not aware of any specific studies of the effectiveness of psychosocial interventions with health anxiety in the elderly, the positive findings in a study of CBT with generalized anxiety disorder in the elderly suggests that the CBT approach applies well to

the needs of this group (Wetherell, Gatz, & Craske, 2003; Wetherell, Lenze, & Stanley, 2005).

## MANAGEMENT OF SOMATIZATION AND HEALTH ANXIETY IN PRIMARY CARE

Individuals with high levels of somatic concern and health anxiety are frequently seen in primary care. In studying two large primary care practices, Barsky, Orav, and Bates (2005) found that patients with somatization had approximately twice the outpatient and inpatient medical care utilization and twice the costs of nonsomatizing patients. Adjustment for the presence of psychiatric and medical comorbidity had relatively little effect on this association.

Researchers have developed recommendations for primary care providers to use in helping patients with health anxiety. Knowledge of these approaches is helpful when behavioral health specialists consult or provide services in primary care. Arthur Barsky has been particularly influential in this area and has developed a cognitive-educational treatment for use in medical settings (Barsky et al., 1988). Barsky (1996) recommends the following key points in approaching hypochondriasis in primary care:

- **Maintaining a single primary care physician:** Allows a physician with a positive relationship and knowledge of the patient to serve as a gatekeeper for medical consultation and care.
- **Focusing on care rather than cure:** Helps patients cope with symptoms, minimize disability, and develop self-care.
- **Underdiagnosing and undertreating**: Encourages careful and calm evaluation of symptoms in primary care (including physical examinations and appropriate expressions of understanding) without excessive use of tests and consultation.
- **Regularly scheduling visits:** Separates the regular attention of the physician from the need for symptoms and suffering. Allows discussion of life stresses and problem-solving.
- **Providing an etiological explanation:** Patients consider the lack of an explanation as an indication of danger. The explanation may emphasize response to stress and tension.

Smith, Monson, and Ray (1986) studied structured psychiatric consultation for individuals with somatization disorder receiving services in primary care. After a thorough assessment, a consultation letter was sent to the primary care physician describing the somatization disorder, including

its chronic relapsing course and low morbidity and mortality rate. The letter encouraged the physician to continue to serve as the primary care physician for the patient, to schedule regular visits (possibly every 4–6 weeks), and to carry out a physical examination each visit. It was suggested that the physician avoid hospitalization, diagnostic procedures, surgery, and the use of laboratory procedures unless they were clearly indicated. Finally, physicians were encouraged not to tell patients "it's all in your head." No other psychiatric services were provided. Quarterly health care charges in the consultation group declined by 53%, while there was no change in the average charges for control patients. The number of outpatient visits remained the same in both groups but a decrease in hospital days for the consultation group was the major factor in the reduction in cost. There were no changes in health status or patient satisfaction with health care.

David Goldberg noted that somatization is almost totally neglected in the training of physicians. Their group developed a model of treatment that would be appropriate for use in primary care during brief medical consultations (15 minutes) over a series of visits, consistent with the approach suggested by Barsky (Goldberg, Gask, & O'Dowd, 1989). This reattribution model of intervention consisted of three stages (a) feeling understood, (b) changing the agenda, and (c) making the link.

The first stage, feeling understood, consists of five steps. First, the clinician assesses the patient's general lifestyle and takes a full history of the symptom from the patient, including how frequently the symptom is experienced in a typical day or week. Any related symptoms are also explored. Second, the clinician reviews the pattern of symptoms, expresses empathy for the patient's experience, and explores emotions related to the symptoms and mood in general. Third, the clinician explores social and family factors. Fourth, the clinician explores health beliefs related to the symptom and general health. And fifth, the physician carries out a brief, focused physical examination.

The second stage, changing the agenda, consists of three steps. The clinician provides feedback on the results of the physical assessment. The physician clearly acknowledges the reality of the symptom. And, finally, there is a reframing of the symptoms as related to ongoing life events.

The third stage, making the link, follows up on reframing, the last step of stage two. The clinician relates the symptoms to the patient's life situation. Common environmental factors linked to symptoms are stress and anxiety, depression, and challenging life events. The approach used is not an authoritarian statement of causes (e.g., "your symptoms are caused by stress") but, rather, a discussion exploring links between symptoms

and environmental factors. Demonstrations may be used to show links between tension and pain, for example, and explanations may be given of the links between stress, anxiety, or depression, and physical symptoms. The clinician may elicit examples from the patient's experiences with family members of the relationship among environment, emotion, and symptoms. Three-step explanations are emphasized in explaining the connection between emotion and symptoms: from emotion to physiological process to symptom. For example, "When people are anxious and depressed, it increases the tension in the neck muscles that hold the head steady, and this will cause headaches." This process of developing a broader understanding of symptoms often leads the patient and clinician to more effective problem solving and treatment.

This model was evaluated in a cost-effectiveness analysis in primary care settings (Morriss et al., 1998). The most common presenting complaints involved pain or fatigue. A high proportion of the patients met criteria for a depressive disorder or anxiety disorder. Patients who presented with the pre-existing belief that their symptoms were entirely emotionally caused were excluded. A cohort of 103 patients recruited before physician training were compared to 112 recruited after the training. Costs and outcome were compared over the 3-month period after the initial consultation. After training, costs of referrals outside the primary health care team decreased by 23% with little overall change in primary care costs. Cummings (2005) describes an alternative approach to somatization in primary care using behavioral health specialists. All aspects of the treatment are more likely to be successful if there is effective communication among the health professionals involved. Our program emphasizes providing information concerning treatment recommendations to primary care physicians when they are involved in the treatment. Generally, this information is welcomed by the primary care provider and other medical specialists involved.

## MEDICAL TESTS AND PROCEDURES

As the years go on, most of us will be required to have medical tests or procedures as part of ongoing health care. Periodic examinations such as mammograms and colonoscopies are now recommended for certain age groups. In some cases these tests are quite routine, while in other cases the tests are more threatening (such as follow-up for a breast lump or bleeding from the bowel). Some individuals find these tests and procedures very stressful.

In preparing for procedures, it is helpful to explore the patient's fears and worries about the procedures. In some cases, helping the individual develop a realistic understanding of the procedures and what to expect can be beneficial. There is a broad range of research on preparing patients for medical procedures. For example, in a randomized controlled trial of a brief educational program to prepare patients for common endoscopic procedures (gastroscopy, colonoscopy, and sigmoidoscopy), all groups received a brochure describing the procedure. Patients in the education condition also received an education session of 10–20 minutes duration with a nurse (Abuksis et al., 2001). Patients in the education program had fewer failed procedures (one-sixth the rate of those without education) and there were cost savings in the range of 5–9% after consideration of the cost of the educational procedure. Similarly, a study of a brief educational program (12 minutes) for a gastroscopy procedure found that less time was required for the test and there were reduced behavioral indications of distress (Maguire, Walsh, & Little, 2004).

Reviews of interventions to prepare adults (Johnston & Vögele, 1993; Moline, 2000; O'Halloran & Altmaier, 1995) and children (Kain & Caldwell-Andrews, 2005) for medical procedures indicate that these approaches are typically beneficial. The effects may be different for individuals with different coping strategies (Davis, Maguire, Haraphongse, & Schaumberger, 1994a, 1994b) or personal characteristics, such as gender, age, or family situation (Kain & Caldwell-Andrews, 2005; Mahler & Kulik, 2002). Evaluation of preparation approaches for specific procedures is necessary and more costly procedures (e.g., one-on-one teaching) may not have increased benefit compared to less expensive interventions such as the use of videotaped models or brochures (Chumbley, Ward, Hall, & Salmon, 2004). There appears to be some advantage to approaches that include information describing not only the procedures but also the sensory experience of the procedure and simple approaches to coping (Moline, 2000).

Beyond the high level of anxiety some patients experience in anticipation of medical procedures, we have observed several beliefs that make coping more difficult for some patients:

- I feel very worried about this test. I must be optimistic, though. I could not cope with bad news.
- I have to stay positive about this procedure. If I think negatively about it, it is more likely to turn out badly.

Since the person is feeling anxious about the procedure, a normal part of that anxiety response is negative expectations about the result. The patient's struggle not to have the negative thoughts makes the thoughts

more of a problem. It is helpful for the therapist to explore these beliefs and to assist the client in evaluating how realistic they are. Many patients appreciate realistic information about how uncomfortable a procedure might be, how most people cope, how often people receive very negative results, and how people cope with the treatment that may follow the diagnosis of a serious health problem. If the problem with worry is particularly difficult, imaginal exposure to the test or procedure and to worries about the health implications may be a useful approach (see Chapter 8 for more detail about this exposure strategy).

*Louise: How will the mammogram turn out?*

*Louise had been through a very difficult two years while she cared for her mother until her death from bowel cancer. After the family home was sold, she was looking forward to a calmer period. This plan was disrupted when her family doctor noticed a breast lump. A mammogram was scheduled for 10 days later and she found that waiting for the test was very difficult. Friends encouraged Louise to remain optimistic but she found herself struggling to fight off worries about what would happen if she had breast cancer. She was upset that she could not control her thoughts. The therapist encouraged her to accept these worries as a normal response to this threat. They reviewed her experiences with people she had known who had breast cancer. While the situation was difficult, these people coped effectively. When she thought of herself dealing with breast cancer and the decisions that would follow, she realized that she would be able to cope by dealing with the situation one day at a time. She found that when she did not have to struggle to keep "negative thoughts" at bay, it was easier to cope with waiting for the test.*

## BLOOD INJURY PHOBIA AND SPECIFIC FEARS OF MEDICAL PROCEDURES

The previous section describes the anxiety experienced by many people related to common but infrequent medical procedures. There is also a significant proportion of the population with long-standing fear or avoidance of specific procedures required in routine health care. Common fears relate to dental procedures, injections or punctures for blood samples, and even routine medical visits. The research on the epidemiology of these fears and phobias is limited, but there are a few interesting studies. Fredrikson, Annas, Fischer, and Wik (1996) studied specific phobias in the community. Factor analysis revealed three types of specific phobias (a) situational phobias (lightning, enclosed spaces, darkness, flying, and heights); (b) animal phobias; and (c) mutilation phobias (injections, dentists, and injuries). Of interest here, current mutilation phobia was

identified in 3.2% of women and 2.7% of men. Similarly, Bienvenu and Eaton (1998) found a lifetime prevalence of blood-injection-injury phobia of 3.5% with a median age of onset of 5.5 years. The problem appears to be very long-lasting, as 78% had also experienced symptoms within the last 6 months. Of those meeting the criteria for this phobia, 23% reported fear of blood, 47% reported fear of injections, and 78% reported fear of dentists. Respondents with blood-injection-injury phobia had higher lifetime rates of fainting (25% vs. 14%) and seizures (17% vs. 2%) than those without this phobia. There was no evidence that the presence of this problem was related to lower health-service utilization. However, individuals with diabetes and blood-injection-illness phobia experienced higher levels of complications, suggesting some interference with treatment and self-care. Note that for every individual meeting the full criteria for blood-injection-injury phobia, there are several others with less intense levels of anxiety that may still cause interference.

One of the notable aspects of blood-illness-injury phobia is that sufferers have a tendency to faint in phobic situations, something that is rarely seen in other phobias. In an interesting study of patients undergoing a painful dental procedure, 50% of those reporting blood phobia reported previous fainting experiences, compared to 10–14% of the remaining patients (De Jongh et al., 1998). In this phobia, it is helpful to obtain a history of fainting and near-fainting over the years. If fainting is a significant aspect of the problem, it is best not to use traditional relaxation approaches as part of the treatment. The approach of systematically tensing the muscles during exposure to the feared situation (called *applied tension*) reduces the likelihood of a rapid drop in blood pressure that is part of the anxiety response in these individuals (Antony & Watling, 2006; Bodycoat, Grauaug, Olson, & Page, 2000; Vögele, Coles, Wardle, & Steptoe, 2003).

## THE PAIN–ANXIETY CONNECTION

There is a long history of research on the connection between pain and depression. Recently, there has been an increased focus on the relationship between pain and anxiety. Epidemiological studies have found that anxiety disorders are even more strongly related to pain conditions than depressive disorders (Gureje, Von Korff, Simon, & Gater, 1998; McWilliams, Cox, & Enns, 2003; McWilliams, Goodwin, & Cox, 2004). Threatening interpretations about the significance of acute pain increase the perceived intensity of the pain (Arntz & Claassens, 2004). Individuals seeking treatment for chronic pain often report high levels of anxiety

symptoms and anxiety disorders (Asmundson, Norton, & Norton, 1999; Asmundson, Norton, & Veloso, 1999). Measures of health anxiety predict disability and negative affect at follow-up among patients receiving treatment for chronic pain (Hadjistavropoulos et al., 2004).

In treating health anxiety in clinical settings, we have observed that episodes of pain frequently cue periods of increased health anxiety. When a pattern of health anxiety is established, the patient's vigilance for pain symptoms and catastrophic interpretations of the significance of the pain often become part of the problem. In dealing with individuals coping with medical illness, it is helpful to assess thoughts, beliefs, and worries concerning experiences with pain. If catastrophic thinking about pain is part of the problem, it may be helpful to work on cognitive reappraisal of the pain experience (Thorn, Boothby, & Sullivan, 2002). Fear-related avoidance of normal activities that could provoke pain may become part of the pattern of chronic pain behavior. Exposure to feared activities may be helpful in reducing patients' anxiety concerning pain (Vlaeyen, de Jong, Leeuw, & Crombez, 2004). Imaginal exposure to feared catastrophes (as described in Chapter 8) may also be helpful in reducing anxiety concerning pain.

## CASE EXAMPLES

Most people will have to cope with a serious illness at some time. Dealing with another person's illness is even more common at every stage of life and is often a focus of worry (Becker, Goodwin, Holting, Hoyer, & Margraf, 2003). Some examples of a CBT approach to these problems are presented below.

*Aaron: What if I have another heart attack?*

*Aaron, a 45-year-old accountant, was referred after having a myocardial infarct (MI). Over the years he had some difficulty with stress and anxiety, especially related to his work. One aspect of this anxiety was a focus on irregular heartbeats. During hospitalization after the MI, it was noted that he had frequent ectopic beats but these were not seen to be of additional medical significance. When he was discharged from the hospital, he described problems with insomnia and episodes of anxiety related to fears about having another MI. He was also very fearful about returning to work and saw work as a potentially life-threatening situation. A stress test nine days after hospitalization showed no evidence of ischemia. Instructions were provided to lower his cholesterol level and to attend to treatment of mild hypertension.*

*Several weeks after discharge from the hospital, Aaron had an episode of symptoms similar to the MI, with tingling in his arms and shoulders and difficulty breathing. An EKG indicated that he was not having an MI. A review of the symptoms suggested that he had experienced a panic attack. He avoided a variety of activities, due to fears of having a panic attack, an MI, or unpleasant memories of having the MI. These included working in the home office where he had the first MI symptoms, continuing on the treadmill when his breathing became more rapid, and sexual activity. Homework assignments were arranged for graduated exposure to each situation and the anxiety subsided. When it was time to resume his work, he acknowledged the worry that taking on challenging work tasks would result in sudden death. We worked on the more realistic view that satisfying and challenging work promotes good health. The problem was not hard work but, rather, a lack of balance between work and leisure. Over time, he was able to feel comfortable in the workplace and he put additional emphasis on managing stress effectively. His thoughts of an untimely death were understandable, given his experience with an unexpected MI. In order to help him face these worries, he was given the assignment of reading accounts of death experiences (Kübler-Ross, 1975). He reported that this work was difficult but left him feeling that he could face the prospect of death more calmly and realistically.*

*Arlene: What if the cancer comes back?*

*Arlene was a 63-year-old woman referred after an inpatient hospital stay for severe anxiety and depression. She had had two episodes of breast cancer. She was followed every 6 months in the Cancer Clinic, and, for several months before her tests, she would experience intense anticipatory anxiety. Arlene frequently sought reassurance from her physicians and family members that she was not going to have a recurrence. In spite of the reassurance, she would often hear of people who were dying of cancer. At times it seemed like death was all around her but no one had talked to her about her concerns about death. When she mentioned her fears about having a recurrence of cancer to her therapist, rather than receiving reassurance, she was encouraged to discuss her worries. She described images of being unable to cope with a recurrence and about dying in unspeakable pain. The therapist discussed frankly what the process of dying was like for others, acknowledging the pain and sadness for the patient and family. It was also emphasized that in spite of their fears, most people do, in fact, handle their own death with a good deal of dignity.*

*The therapist agreed that her chances of developing cancer were considerably higher than most people. One way or another, she would have to deal with the reality of death. Rather than constantly being vigilant for signs of cancer, the therapist challenged her to consider how to use the time before her death. She had not been investing much energy in living and enjoying life. A helpful homework*

*exercise was to address the following questions: What if you have only one year left to live? How would you react at first and how would the reaction change over time? How would you like to spend that time? When it comes to the end of life, how would you like to handle the situation? Arlene found that she was able to think and talk realistically about the prospect of death and it did not seem so frightening. With consistent encouragement from the therapist, she started to invest more time in activities with her family and friends and in enjoying life.*

*The therapist maintained contact with Arlene over the following years. There were a number of difficult family problems to work through and she did have a recurrence of cancer. While this was stressful, she coped better than she expected. She was active and involved with her family until her death. She received reasonable pain control and stayed at home until the last weeks before her death. When death came, family members were around her.*

*Julie: What if he has a heart attack?*

*Julie, a retired office manager, was referred for problems with generalized anxiety and health anxiety. She was particularly concerned about her husband's health. He had a heart attack at age 66 and she found the experience, particularly his stay in intensive care, to be very traumatic. While she had never had difficulty with health anxiety previously, she found that after this incident, she would become anxious if she encountered television or newspaper stories concerning medical problems or serious diseases. She would do her best to avoid these situations and had the sense that she would not be able to cope if her husband had another heart attack. There was also a great deal of worry about her health and about the challenges her children were facing in their relationships and careers. It was noted that, other than extensive contact with her children, she and her husband were quite socially isolated.*

*Julie was encouraged to cope with the problems with health anxiety by facing her fears. She was somewhat reluctant about this approach at first but she understood that at her stage in life, it would be normal to face health problems. Several areas of work were identified. One was to gradually face situations she avoided related to health worries. She watched medical dramas and documentaries on television at least three times a week. To deal with traumatic memories about her husband's MI, she wrote a description of the experience with her husband's heart attack and subsequent treatment. She practiced facing these memories by scheduling time to review the story and the related memories and emotions every day for a week or two (until the story no longer elicited a strong emotional reaction). We discussed that most women outlive their spouses by 5 to 10 years and that it was important to develop her independence and self-confidence. It was agreed that it was important for her to increase her range of social contacts in order to increase her enjoyment of life. She joined the women's group at a local church and re-established contact with a number of old friends. She found that after a few weeks of work in these areas, she was much less*

*preoccupied with her worries and more able to face the prospect that she or her husband could certainly encounter health problems in the future.*

## MEDICAL INFORMATION FOR CLINICIANS

There are a number of helpful resources for clinicians assisting clients in dealing with medical illness. Arthur Nezu and his colleagues have evaluated problem-solving training as a way of assisting those dealing with serious illnesses such as cancer (Nezu et al., 2003) or the role of caring for a family member with chronic health problems (Nezu et al., 2004). Sharoff has developed a comprehensive approach to helping patients manage chronic and terminal illness (Sharoff, 2004a, 2004b). White (2001) describes cognitive behavior therapy for a variety of common health problems, including cancer, chronic pain, diabetes, cardiac problems, and surgical problems. The approaches described in this book would fit well with these treatments.

A challenge for mental health specialists who are not medically trained is to become informed about the medical conditions, procedures and treatments that clients experience. One reliable source of information is discussion with colleagues with expertise in the area. References for other helpful sources of information are described in more detail in the Resources for Clinicians Section at the end of the book. A very helpful source of information about medical tests is *The Johns Hopkins Consumer Guide to Medical Tests* (Margolis, 2001). Helpful resources on medical conditions and treatment are *The Merck Manual of Diagnosis and Therapy, Eighteenth Edition* (Beers & Berkow, 2006) for the clinician and *The Merck Manual of Medical Information: Second Home Edition* (Beers, 2003) written for the public. Much of this material is also available at http://www.merck.com/pubs/.

## CONCLUSION

Health anxiety is particularly common in the medically ill, in patients undergoing tests and procedures, and in older patients, but the concerns of these patients often go unattended. It is very helpful for the clinician to become familiar with interventions and resources in this area. In our experience, the approach described throughout this book is well accepted in these populations and is able to produce meaningful reductions in distress. This work can be particularly satisfying because the clinician is providing support to the client at a time of especially high need.

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# SUBJECT INDEX

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