HEALTH ANXIETY

INTRODUCTION

Health Anxiety, also known as Hypochondriasis, is a persistent and excessive fear and worry about health and disease ---- and a source of intense inner suffering for large numbers of people. Doctors, family members friends and even patients themselves often regard people with health anxiety (HA) as annoying, mentally disturbed and subject to ridicule and rejection. While it is indeed difficult for doctors and others to treat HA directly, remediation can occur if there is a comprehensive and reasonable explanation for why and how people get this way, and a program for helping people lesson their suffering. Therefore this monograph is devoted to providing a rational and compassionate explanation for the origin, development, and maintenance of HA , along with a program for helping people live with and to varying degrees overcome their fear and worry. The objective of this monograph is to promote greater acceptance and constructive remediation of this troublesome condition by all who are affected by it.

HA is essentially a psychological phenomenon expressed in medical terms and experienced within a medical arena. People worry excessively about their health and/or are terrified of having a particular disease. They have faulty beliefs about health, illness, doctors, and the medical care system. Inner suffering comes from the expression of their emotional fears and inability to obtain relief, in spite of repeated attempts to obtain help and comfort.

Consideration of HA lends itself to using the biopsychosocial model of health care – as contrasted with the biomedical model – to understand, diagnose and treat this condition. The biopsychosocial model takes into account the physiology(nature), environment (nurture) and the beliefs(notions) of individuals and how they interact leading to disease and disability. The biomedical model emphasizes only the physiological component and in fact may be very appropriate when dealing with a clear biological disease such as pneumonia or other infectious diseases. With respect to HA the patient's health beliefs along with stress-inducing circumstances in the environment are crucial factors in causing and maintaining this condition. While genetic factors do contribute to causing HA they are not nearly as influencial as what patients have learned regarding health and illness in general, and their own bodies in particular. These causative factors will be elaborated in more detail later in this monograph.

A typical scenario may arise in the following way. A seemingly normal 45 year old man (John – a fictitious name) reads about a 42 year old athlete who died suddenly of a cardiac arrest following a myocardial infarction (MI-heart attack) . Soon afterwards John begins to become very fearful that he may also have a sudden heart attack and begins to pay

close attention to the sensations emanating from his body, especially in his chest. He becomes more aware of his heart beating as well as the rhythm and strength of the heartbeats . He checks his pulse repeatedly and buys a home blood pressure cuff to monitor his blood pressure(BP) 2 or 3 times a day. Since he is becoming increasingly fearful – this is called anxiety – his BP and heartbeat(pulse) are likely to be somewhat increased, and he may experience some anxiety-related chest tightness. John at this point has become even more anxious and more worried that he too may have an imminent heart attack. He may then read about heart attacks on the Internet, particularly the early signs of an MI. John will probably visit doctors and demand various tests, i.e. blood tests, stress test, angiography, to ascertain whether or not he is having an MI. He may ask doctors and others whether they think he is having an MI. While people without HA may be reassured by feedback from doctors, those people with health anxiety, including John, may still remain anxious and visit additional doctors in an effort to obtain some relief from their distress. These repeated attempts to obtain reassurance are based on the persistent belief that they have a serious disease. In John's case, as his anxiety continues – even with periodic reassurance – he is likely to become depressed, stop exercising, become aware of the location of nearby emergency rooms and otherwise begin to obsessively worry about his health. He may expand his body checking to include other abnormalities, but especially looking for symptoms that he thinks could be early indicators of an impending heart attack. Obviously John is thinking catastrophically and behaving irrationally. He may get temporary relief from his anxiety by reassurance from doctors, family members and others, but as is typical of other people with health anxiety, the worry, body checking, and reassurance seeking continues. John becomes increasingly fearful and desperate for even temporary relief. Nevertheless, it is unlikely that John will obtain any sustained relief unless he understands the nature of his HA, how it originated and how it is maintained in spite of his best efforts to relieve his suffering. In particular is it necessary for John to appreciate how he learned to become so fearful about his health.

HEALTH BELIEFS : THE ORIGIN OF HEALTH ANXIETY IN SUSCEPTIBLE INDIVIDUALS

People with health anxiety (HA) have a set of beliefs regarding health and disease that are largely irrational. Not all people with HA have exactly the same beliefs, but most or at least some of the following beliefs to varying degrees characterize HA. Needless to say, people who believe things to be true don't consider the possibility their beliefs could be irrational or false. On the contrary, these beliefs are considered to be accurate representations of reality, and fervently adhered to by those who believe them.

Health worriers have a belief and expectation that their own health is precarious and that they are vulnerable and susceptible to sickness and disease. Their bodies are regarded as weak and fragile rather than strong and resilient. In addition, they believe that it is critically important to identify diseases very early in the course of the disease progression

in order to be best able to properly treat the disease. While the principle of early detection is valid, the obsessive preoccupation with possible early indicators of disease is not reasonable and is an indication of anxiety rather than good medical practice.

Perhaps the most distressing, dysfunctional belief widely held by people with HA is the tendency to think catastrophically about all sensations and/or other symptoms experienced in the body. Coughing may be thought to be a sign of pneumonia or lung cancer, a headache thought to indicate an aneurism or stroke, minor abdominal or bowel irregularities believed to be signs of stomach, colon or pancreatic cancer. Once this kind of thinking gets established, it tends to persist as HA sufferers obsess, worry, check for other signs of illness, and in general focus their attention on what they believe to be an impending medical catastrophy.

Many if not most sensations, symptoms and minor irregularities of body functioning are benign normal variations and no cause for concern. However, people with HA tend to regard all symptoms or sensations as indications of disease. In addition, they believe that all symptoms require a medical explanation and expect doctors to be able to know the cause and significance of these sensations that are thought to be symptoms of disease. When pressed for an explanation, doctors may speculate about possible causes of particular symptoms and HA patients interpret the doctor's speculation as either a diagnosis, or that the doctor doesn't really know what the doctor should know. When HA patients visit multiple doctors with anxiety about the existence of benign symptoms, different doctors may offer different ideas or may speculate differently than other doctors. HA patients expect doctors to be certain and consistent with each other. While there is a high degree of certainty and consistency among doctors when a patient has a clearly diagnosable disease, i.e. lung cancer, MI, etc., for most benign symptoms diagnostic certainty is rare, especially with regard to the symptoms and sensations of concern to people with HA. For people with HA these kinds of interactions with doctors are very important because they believe that symptoms that can't be explained are serious and a possible indication of a serious disease.

When people are worried and fearful of some anticipated event that is considered to be a threat to their well being – such as illness and disease – they tend to experience anxiety. Anxiety itself can be expressed cognitively with fearful thoughts, emotionally with feelings of imminent harm, and somatically with physiological expressions of an impending destructive event. Symptoms of anxiety can include increases in heart rate and B/P, muscle aches and twitches, abdominal discomfort, changes in digestion, changes in urinary and bowel function, and alterations in balance and equilibrium, as well as other bodily changes. Many of these changes occur as an expression of the "fight or flight" response to the perception of danger. The key here is PERCEPTION. The body doesn't distinguish between a real danger and the perception of danger when in fact there is none. In either situation the body prepares itself to either confront or run away from the threatening event – for people with HA the possibility of a dangerous disease. This is why the learning process is so important to health anxiety. People learn that bodily sensations are dangerous because they can be indications of a dangerous disease. People with HA perceive a variety of normal,

benign bodily sensations as threats to their well being, but this perception is not at all helpful in protecting them from harm. On the contrary, these sensations often evoke a physiological anxiety reaction which makes the bodily sensations more intense and therefore more frightening. It is ironic that people with HA try to protect themselves by anticipatory worrying, and heightened sensitivity to perceived inner bodily threats, but actually make their suffering worse by their attempts to make it better.

In general people with HA believe that the experience of anxiety itself can be harmful, if not in the present then at some time in the future. As indicated above, some people do not identify anxiety symptoms as anxiety but rather as actual manifestations of disease. Nevertheless, the fact is that symptoms of anxiety per se are mostly benign, especially when recognized as such and ignored. When people become frightened of anxiety the manifestations of anxiety - as described earlier – tend to increase and in many cases leads to panic. When panic is experienced by people with HA, there is often a catastrophic belief that death is imminent and that a severe medical condition, i.e. cardiac, has taken over the body. This usually necessitates a visit to the nearest emergency medical facility

There are a number of additional beliefs that are characteristic of people with HA. If one believes that a disease is present, then there is a need for evidence to prove that a person is healthy and free of disease. This usually means the results of various laboratory and imaging tests to rule out the existence of disease. Patients with HA often insist on x-rays and blood tests even when doctors don't think there is an indication for doing them. Nevertheless, doctors often accommodate these patient requests with the mistaken belief – by the doctor – that the test results would provide comfort and reassurance for the patient. As is often the case, the test results are equivocal or point to the possibility of some other abnormality. Ultimately it is the doctors judgment that determines the need for and the significance of various test results. However, for people with health anxiety, doctors judgments and probability estimates are not reassuring or sufficient to alleviate their anxiety. People with HA need absolute certainty and believe that 100% certainty is possible with an extensive medical workup. The paradox is that more and more tests are desired to relieve health worries but to the HA patient the more tests that are ordered the more it appears to the patient that the condition is serious, and therefore cause for increased health anxiety. When doctors and others in the medical care system are unable to provide this absolute certainty required for anxiety reduction, patients tend to distrust the efforts of doctors and other medical care professionals. By contrast, some people are so afraid of what the test results may indicate, and therefore avoid having medical tests even when they are medically indicated and prescribed by a doctor.

Hardly anyone wants to be sick or to develop a serious disease. Most ordinary people don't think about illness or disease until it happens and then seek a diagnosis and treatment for the disease. People with HA on the other hand anticipate the future occurrence of disease and worry about how terrible it would be if and when they do have the disease. In fact, the anxiety associated with illness and disease expresses an expectation that suffering in many forms inevitably accompanies illness. For some – but not all – people, the fear of physical pain is their primary concern. For others the fear of losing control of

one's body and losing the ability to continue engaging in the basic aspects of daily life, such as eating, walking, urinating, etc. are paramount. These people may also be fearful of physical pain but losing control is more fundamental to their sense of well being. Still others may be afraid of losing their independence and dread the prospect of requiring basic daily care from family members and other professionals such as nurses and home attendants. People who are responsible for the care of others – especially parents of young children – may be frightened of leaving their children without attention, love, care and guidance. Finally, a sizable number of people sense that they would become very depressed in response to a serious illness or disease, and would be overcome with despair. Of course there may be additional worries that people may have, or they may have multiple fears including those that were mentioned above. Ultimately people with HA pay attention and worry about the worst aspects of disease and suffering rather than the likelihood of becoming sick or the many ways of treating disease and minimizing suffering.

Health anxiety usually occurs in people who worry about their own health. Yet there are a significant number of people who have intense anxiety regarding the health of someone else, typically a child or another person they are afraid of losing. Anxious parents, for example, will become focused on the ordinary body functioning of their child and communicate their fears to the child in a variety of ways. Instead of paying attention to their own bodily sensations they concentrate of what appears to be going on in their child. They watch the child very carefully, being sensitive to any alterations in body functioning such as coughing, eating, digestion, energy level, and in some cases even urinating and bowel movements. Underlying this excessive surveillance behavior directed toward the child are similar beliefs regarding vulnerability to illness, disease, anxiety about the child becoming sick and the fear of catastrophic outcomes if illness occurs. In the event the child develops a mild or minor ailment, the parent is likely to engage in repeated checking of various signs of illness, i.e. fever, and seek reassurance from doctors regarding the seriousness of the illness and that it is not life-threatening. Obviously the HA of the parent provides the basis for the child to develop HA either in the present or more probably in the future. It is also one of the important ways that HA can be acquired by learning.

CAUSES OF HEALTH ANXIETY

As indicated above, health anxiety is caused by a variety of different factors interacting with each other to create patterns of thinking and behavior. Genetic inheritance has been found to contribute somewhat – but not substantially- to the emergence of HA but the mechanism is unknown. Far more important is the role of learning in the origin, development and maintenance of HA. Children learn from observing , listening, and experiencing the world around them, Naturally the younger the child is, the more likely their exposure to sights, sounds, language, ideas, values, pleasures, dangers and fears will be structured and provided by the child's parents. Therefore, if parents communicate to their children a reality that includes implicit and explicit messages of body fragility and vulnerability to disease, expectations of catastrophic outcomes if illness and disease were to

occur, and the need to closely monitor bodily functions to prevent the occurrence of serious disease, it is very likely that children will learn to be anxious about their health. Even without the direct influence of parents or other adults, children also learn about health and disease indirectly by witnessing how adults close to them experience an illness and what affect the adult illness has on the life of the child. When a child's mother becomes sick, the child is often not cared for adequately nor is the illness explained to the child. Children naturally tend to exaggerate potential consequences to ordinary events and may become frightened when they observe the person who provides strength and security for them becoming disabled. It is in a way ironic that the more intelligent a child is, the more likely the child is able to learn from observing the behavior of other people. Intelligence in this sense is understood as the ability to learn – either in school or by observation.

There are a variety of other factors that influence the emergence of HA in susceptible individuals. None of these factors by themselves are direct causes of HA, but rather contribute by increasing the probability that along with other predisposing factors HA is more likely to occur. PESSIMISM is one such factor and is an orientation to life events in which the expectation is that an adverse or negative outcome is much more likely to occur than a favorable or positive outcome. Thus, minor alterations of body functioning or expectations regarding the results of diagnostic tests are likely to be perceived from a negative future orientation. Another factor is the existence of DEPRESSION in people with HA. Thinking patterns in depressed individuals often reflect an expectation for negative future outcomes whether they are health related or not. Moreover, people with health anxiety often become depressed when they find themselves repeatedly having episodes of anxiety regarding their health, and being powerless to alleviate the anxiety. Both HA and depression seem to reinforce each other, but either one can exist without involvement of the other. Another important factor is GENERALIZED ANXIETY about non-health related fears. For example, PHOBIAS are often also present in people with HA. Fear of heights, closed places, fear of flying, etc. are often included along with the many fears that are common in people with HA. However, as with depression, there is no necessary connection between anxiety in general including phobias, and health anxiety in particular. In fact HA - known as hypochondriasis – is classified as an illness anxiety disorder within the broad category of somatic symptom disorders.

OBSESSIVE-COMPULSIVE DISORDER (OCD) is an anxiety disorder that is in many ways similar to health anxiety. People with OCD have recurrent, intrusive thoughts or ideas that evoke anxiety. In order to relieve or resist the unwanted anxiety people typically engage in some behavior that is repeated ritualistically and may very briefly relieve anxiety. The obsessive thoughts are accompanied by repeated(compulsive)behavior patterns. A common example would be a person afraid of germs who repeatedly worries about becoming contaminated and engages in hand washing many times a day to ineffectively manage the anxiety. Another example is someone who repeatedly thinks that the door is unlocked and then checks the lock on the door many times to make sure that it is locked.

People with HA have intrusive, recurrent thoughts about having or developing a serious disease and often check themselves repeatedly or ask for reassurance over and over again. These recurrent, fearful health worries are very similar to obsessions, and the repeated checking and reassurance seeking is very similar to compulsive behavior. Nevertheless, there are some people with HA who do not have OCD, and those with OCD who do not worry about their health.

SOMATIZATION refers to the occurrence of actual physical discomfort in one or more parts of the body, and after medical examination by physicians the symptoms have no medical explanation that can adequately account for the patient's complaints. In other words there is no physical or medical cause for the physical symptoms and yet patients complain of physical discomfort. In these cases, after an often extensive medical work-up, the explanation is that there are some stress-related circumstances in a person's life that are causing the physical (somatic) symptoms in the body which is why it is called Somatization. This is often very difficult for patients to comprehend since they are experiencing physical discomfort and are expecting that medical diagnosis and treatment can alleviate their discomfort. They typically have pain or other bodily distress that interferes with their daily functioning. Unlike people with HA they are not overly worried and fearful, nor do they anticipate major catastrophic progression of their symptoms. Their primary concern is symptomatic relief. They don't need detailed explanations or absolute certainty regarding the possibility of serious illness. Nevertheless, there are similarities between HA and Somatization in that there is no actual existing disease that that has been identified and which can account for the symptoms in both the case of Somatization and the worrying and catastrophic expectations in people with HA. The fundamental similarity between HA and Somatic Symtoms Disorder is the somatic expression of stress and the emotions associated with it. Both groups of people have major difficulty recognizing and experiencing emotions directly. The emotions of fear, sadness, anger, resentment, self-pity and others tend to be either greatly diminished, or poorly recognized in both groups, and bodily distress becomes the focus of attention. How this transformation occurs is not well understood, but its existence is well accepted by doctors and others who have contact with these two groups of patients.

HEALTH ANXIETY OR SERIOUS DISEASE

Perhaps the most perplexing and frustrating dilemma for people with HA is to figure out the difference between body sensations that are either benign or expressions of anxiety, and sensations that are symptoms of serious disease requiring immediate medical attention. A headache could represent benign muscle tension, a migraine which could be treatable, or rarely a cerebral aneurism which is life threatening. Similarly, chest pain could result from muscle tension, anxiety, or a myocardial infarction(heart attack) requiring immediate medical attention. Another example could be an episode of difficulty breathing and shortness of breath, which could be due to anxiety or a sign of a progressing asthma attack. Even for people without HA it is sometimes difficult to determine when pain or other body

sensations are symptoms of serious diseases. For a person with HA who is predisposed to worry about having a life-threatening disease, and who needs absolute certainty to rule out having such a disease, this dilemma can be excruciating. While it is true that life-threatening symptoms occur very rarely, the consequences both for doctors and patients for missing a life-threatening symptom can be very serious indeed. So how can this dilemma by resolved for people with HA in order to make an objective determination of the meaning of their symptoms. The importance of this dilemma cannot be over- emphasized . For many people with HA this is the crux of their problem, i.e. how to distinguish a worrisome, benign body sensation from one that is truly serious and potentially life threatening. A descriptive summary of bodily symptoms requiring immediate medical attention can be found a bit later in this monograph.

The first step is to recognize that becoming aware of a body sensation is a perception which is partly subjective and is influenced by the meaning which the body sensation has for the person. For example, worrying about an impending heart attack will lead a person to pay close attention to sensations occurring in the chest, while worry about colon cancer brings attention to the abdomen. Secondly, people who worry about becoming seriously ill, and who expect adverse body sensations to occur, tend to experience body sensations more intensely than other people. This is true regardless of whether the sensation is or is not a symptom of illness. This is also one of the reasons why it is so difficult for people with HA to differentiate between an intense body sensation and other sensations that are less intense and generally benign. Overall there is a close association between the seriousness of a sensation and its intensity. While it is not always the case that seriousness is related to intensity, most of the time when there is a body malfunction that is life threatening, something dramatic happens that brings a person's attention to their body. Intense pain is the most common indication of a potentially life threatening disruption of body functioning. In this way pain is often one's friend rather than one's enemy in the sense that it lets a person know that medical attention is required which can prove to be life saving. In addition to pain there are other indications of serious disease that require immediate attention, including difficulty breathing, bleeding with or without pain, and alterations in seeing, hearing, talking, and moving one's arms and legs.

Perhaps the most important distinction between medically serious symptoms and other benign sensations is the actual nature of the symptoms themselves. Pain from a heart attack is qualitatively different than pain arising from muscle tension. The actual manifestations of colon cancer are different than the feared abdominal sensations erroneously attributed to colon cancer. Therefore, when a person experiences bodily sensations it would be very helpful to know how the feared diseases actually present themselves. This knowledge helps to distinguish between benign and serious symptoms and helps determine when immediate medical attention is necessary. A description of how

many specific diseases present themselves is beyond the scope of this monograph. For people with HA who are terrified of having a particular disease and who check their bodies for signs of that particular disease, it would be useful for these individuals to do some research about how the feared disease occurs in the body and what are its early symptoms. However, for people who are afraid of illness in general and whose fear is not circumscribed by only one disease, it would be very instructive to become aware of which body sensations or symptoms are urgent and which ones can either wait for medical attention or be ignored entirely. Therefore, what follows is a generally accepted list of symptoms that require immediate medical attention.

SERIOUS MEDICAL SYMPTOMS REQUIRING IMMEDIATE MEDICAL ATTENTION

1. Paralysis of arms or legs, tingling, numbness, confusion, dizziness, double vision, slurred speech, trouble finding words, weakness, especially on one side of the face or body.
2. Chest pain or discomfort, pain in the arm, jaw or neck, breaking out in a cold sweat, extreme weakness, nausea, vomiting, feeling faint, or being short of breath.
3. Tenderness and pain in the back of the lower leg, chest pain, shortness of breath, or coughing up blood.
4. Blood in the urine without accompanying pain.
5. Asthma symptoms that don't improve or get worse after 2 or 3 hours.
6. Depression and suicidal thoughts if a person indicates that suicide is imminent. Sadness, fatigue, apathy anxiety, changes in sleep habits, loss of appetite.
7. Black tarry stools
8. Headache that is sudden and agonizing, more serious than ever before.
9. Uncontrolled bleeding.
10. Sudden or severe pain
11. Major burns
12. Serious bone fractures
13. Headache, fever and stiff neck.

Source: Web MD

Unfortunately there are times when very serious diseases don't present themselves with intense body sensations, and there are other medical circumstances where intense body sensations are not serious. Moreover, mistakes are made in assessing whether or not body sensations are serious requiring medical attention, both by patients and by doctors. While absolute certainty is not possible, there are very high probabilities that serious conditions will be recognized, especially when there are medical resources (doctors, hospitals) to manage serious medical diseases when they do occur. Living in the world carries with it certain risks. In reality people are capable of minimizing their risks so that the probabilities of adverse events are very small. For people with HA this awareness is not enough to alleviate their anxiety, since they believe that only absolute certainty will alleviate their fears. They need to learn to think of probabilities and trust that they will not be the victim of an extremely unlikely occurrence.

HEALTH ANXIETY TREATMENT PROGRAM

Treatment for HA patients involves a number of different processes, starting with understanding how HA originates and is maintained, and ending with changes in thinking and behavior so that HA no longer interferes with everyday life. The program is multifaceted and requires a commitment of time and effort, but the results are often very rewarding with a lessening of confusion and suffering. It is usually necessary to have at least one other person acting as a teacher and a behavior change facilitator. Sometimes the treatment can include a group of people with HA meeting weekly, followed by individual sessions with a counselor or facilitator. There are four major aspects of the treatment program, which are listed below and then elaborated further in what follows.

1. Health Anxiety Education
2. Cognitive Therapy
3. Exposure Therapy
4. Response Prevention

HEALTH ANXIETY EDUCATION

There are four aspects of the health anxiety education segment of the HA Treatment Program. The first and perhaps most important learning for people with health anxiety is to recognize and understand their catastrophic thinking patterns. People need to learn that the way they think about health, illness, sensations, symptoms, doctor visits, medications, and diagnostic tests are at the root of health anxiety. The meaning that patients give to these aspects of health care reflects a catastrophic thinking pattern that leads people to become more anxious, amplify their physical sensations, and engage in behavior patterns that they think will make them less fearful but which actually increases and maintains their health anxiety. The way people think determines how they will feel and how they will behave. The habitual monitoring of body sensations and paying attention to the reports of disease in other people leads to an activating event that sets into motion a cascade of thoughts, emotions and behaviors. The purpose of health anxiety education is to make patients aware of this cascade of catastrophic beliefs or interpretations of inner sensations or outside events, which leads to inappropriate emotional and behavioral responses as a direct consequence of their beliefs. The emotional responses are fear and anxiety while the behavioral responses are checking, avoidance, or seeking reassurance from friends, family and doctors. It should be emphasized that it is not the symptoms or sensations per se that are disturbing to people. It is the meaning – usually catastrophic – attributed to symptoms or sensations that accounts for the development and maintenance of health anxiety.

Another aspect of HA Education for people with HA is to explain the normal physiological responses to threatening events that are ordinarily experienced as stress. Events such as an impending physical attack by a person or animal, the death or separation

from a loved one, loss of a job, etc. are usually considered to be stressful and accompanied by anxiety, fear and worry. The stress response can be experienced physiologically as well as emotionally and is known as the Fight or Flight Response. This response is often protective in that it alerts the person to prospective danger and enables the person to take some action that may be life saving. In the case of a physical attack this involves fighting or running away. The key point to be learned is that the stress of some kind of threat to the person's well being – especially regarding their health – is based on a perception of danger, not necessarily a real danger. This distinction is crucial in helping people understand and try to lessen their health anxiety. When the danger is real, then protective actions are constructive, but when the perceived danger to the person's well being is not real, then the protective actions are not constructive and often emotionally destructive.

A third aspect of health education for people with HA involves learning why checking the body for abnormalities, seeking reassurance from others that there are no abnormalities, and consulting numerous doctors are not only excessive, but also perpetuate the anxiety. These behaviors, known as safety – seeking behaviors, relieve anxiety briefly, but then the fear and preoccupation with being very ill continues. People with HA need to learn that these behaviors don't lead to a lasting decrease in their worry and fear, but rather serve to increase their anxiety. While it may be difficult for a HA patient to stop these habitual behaviors, it is important for patients to recognize that this pattern is characteristic of people with HA, and is another important part of the health education protocol.

The fourth aspect of health education is to understand the difference between the sensations of normal body functioning and actual physical symptoms. Many bodily sensations are quite normal and not at all indicative of disease. Pulsations, various digestive sounds, muscle tension and relaxation, minor aches and pains, warmth, coldness, and sweating of the skin, sensations of energy and fatigue scan all represent the normal "noise" that exists in the body when it functions normally. Most people don't pay attention to these sensations as they may increase or decrease during the course of a day. People with HA, who worry that they may get a disease or that they already have a disease tend to be hyper-vigilant to slight changes in these sensations and worry about their significance. In fact, there is a tendency to amplify the actual sensations so that they feel more intense than they were initially. This "amplification of sensations" is characteristic of people with HA who need to learn that normal sensations do exist and that they do not necessarily indicate serious disease.

Some people are very reluctant to change their habitual, long-standing patterns of thinking about health and disease. They continue to believe that what they think and feel is based on reality and is not just a faulty thinking pattern. Another somewhat larger group of people recognize that their thinking is irrational, but find it very difficult to change how they think, feel and behave. For this group of people the next stages of the HA treatment program are most helpful, namely cognitive therapy, exposure therapy and response prevention.

Cognitive Therapy (CT) is based on the cognitive model of emotion which presumes that emotions such as fear occur as a result of how one interprets a situation, a stimulus, or a sensation. In HA people invariably interpret particular situations, stimuli, or sensations as threatening to their well being and therefore engage in safety-seeking and fear-reducing behaviors. The anxiety emotions and the resulting avoidance, checking and reassurance seeking behaviors have been discussed already. The purpose of CT is to reduce, modify or eliminate the source of this cascade of dysfunctional beliefs about health related internal and external stimuli.

It is not easy to change people's beliefs, especially when the beliefs are connected to what people consider to be life-threatening circumstances. CT includes a set of techniques for challenging and modifying thinking errors that lead to emotional distress and maladaptive behavior. These techniques are based on the premise that rational thought can interrupt the existing automatic responses. Since rational thought is reality oriented and utilizes evidence for developing understanding, the major emphasis in CT is looking at evidence both for and against threatening thoughts.

People with HA rarely –if ever – question the validity of their beliefs about body sensations, negative expectations, potential catastrophic outcomes, medical tests, and the behavior of doctors. In cognitive therapy the therapist doesn't challenge or overtly disagree with the HA patient's beliefs. Instead, the therapist considers these beliefs to be "possibilities". Although the HA patient "knows" that their beliefs are valid, this certainty is based on emotional, anxiety laden reasoning. If a belief is associated with intense anxiety, the immediate conclusion is that there actually must be something to be afraid of. In CT, the therapist asks if there are alternative ways of thinking about these body sensations, medical test results or other aspects of potential diseases that are so fearful to HA patients. The therapist tries to develop a collaborative relationship with patients in which facts are looked at from many different sources, including the patient's own past experiences. In this way a variety of questions can be raised that are explored by the therapist and patient together, particularly the question of evidence both for and against the health beliefs held by patients. In addition, attention is given to possible facts that are not being considered and previous outcomes based on the patients health beliefs and outcomes. This process gradually enables HA patients to at least consider the possibility that their expectations are not accurate and that feared outcomes will not occur.

Each health belief that the patient has – and which elicits anxiety – is looked at and challenged, based on evidence both for and against the validity of the belief. Using the term "health belief" implies that there are alternative beliefs held by other people. People with HA believe that that their own health beliefs are not merely beliefs but actual facts that they know to be true.

Many dysfunctional beliefs held by people with HA have already been mentioned earlier in this monograph. In this section the process by which faulty beliefs are challenged and ultimately modified is being considered. In addition to focusing on evidence that either confirms or refutes health beliefs, there are two other techniques that are widely used; namely behavioral experiments and informal discussions of cognitive errors. Behavioral experiments are actual demonstrations of whether certain beliefs are actually valid. These experiments encourage the HA patient to do something concrete to demonstrate tangibly the verbal understanding of faulty beliefs. For example, if a person believes that something dreadful (i.e. heart attack) will happen if he doesn't check his heart rate (pulse) then doing an experiment involves deliberately not checking and observing what happens. As the patient notices that a heart attack did not occur, this leads to the patient gradually changing the erroneous health belief about pulse and heart attacks. Verbal understanding of irrational beliefs is important, but actually demonstrating behaviorally the faulty expectations of adverse medical outcomes is more powerful and pervasive. Therefore, behavioral experiments are added to the treatment protocol and often introduced immediately following a verbal recognition of irrational beliefs about a variety of medical concerns.

Informal discussions of cognitive errors are an outgrowth of a sustained positive relationship between patient and therapist. HA patients often equate anxious feelings with imminent danger. This "emotional reasoning" can be pointed out to the patient in an informal way even without a more structured intervention by the therapist. In this way the HA patient is repeatedly reminded of the faulty belief that fearful emotions are an automatic predictor of some adverse health event.

EXPOSURE THERAPY AND RESPONSE PREVENTION

The importance of catastrophic thinking patterns and the need to change those patterns should not be minimized. Nevertheless, perhaps the most central feature of the HA treatment program is for patients to actually change their behavior. This involves changing their approach to fear by confrontation rather than avoidance. Fear evoking stimuli become less frightening when they are confronted and become more frightening when they are avoided. In many ways confrontation rather than avoidance is the essential goal of the HA treatment program and represents the culmination of the treatment. The techniques utilized to implement confrontation involve exposure therapy (ET) and response prevention. Of course it is critically important to not overwhelm the patient with anxiety. Therefore, the methodology for initiating confrontation in ET takes this into account and introduces behavior change activities that are consistent with individual patient's readiness for change. Response prevention basically seeks to prevent patients from reverting back to anxiety-reducing behaviors such as checking and seeking reassurance.

People with HA are often afraid of stimuli in three areas of concern; situations in real life, the inner imagination, and body sensations. In each of these areas, HA patients are taught to gradually confront the fear-evoking stimulus and allow the resulting anxiety to be experienced. While this can often be initially terrifying to patients, repeated exposure to the stimulus leads to a gradual reduction in the intensity of the anxiety. This process is known as "habituation" or "desensitization."

With regard to situations in life that are external to the patient, it is important for the therapist and patient to collaborate in developing a list of situations and stimuli that trigger anxiety and distress in the patient. Some examples of these situations include talking to someone with the feared disease, reading about someone who has the disease, or watching a television program about the feared disease. Before attempting to confront any of these situations it is useful to develop a hierarchy of situations from least to most fearful. On the basis of this hierarchy the least fearful situations can be introduced first, followed by progressively more fearful situations and stimuli. It is often necessary to repeat particular exposures multiple times before the patient begins to feel comfortable.

People with HA often have intrusive inner thoughts and images of disease, death and suffering which causes fear and distress. In response, people typically try to eliminate the thoughts and images by trying not to think about them, but without success. Based on the principle that confrontation is better than avoidance, ET attempts to purposefully confront these thoughts and images repeatedly rather than trying to avoid or escape from them. Since these thoughts and images are related to expectations for diseases occurring in the future, ET can not only weaken the association between thinking and fear, but can also encourage more realistic thinking about disease probabilities. As with situational exposures, patients are encouraged to develop a hierarchy of thoughts and images from least to most fearful, with exposures introduced accordingly.

Normal, benign body sensations are often triggers for significant anxiety in people with HA which leads them to seek medical attention and/or reassurance from friends and relatives. The sensations take on a life of their own and are sources of great distress in people with HA. People often focus on these sensations so much that they seem to become more intense and more frequent as time goes on. Therefore, people are often desperate to eliminate the sensations or at least diminish their intensity by seeking medications or other treatments in order to reduce their anxiety. ET can help by introducing planned and supervised exposure to these feared sensations. Various techniques can be utilized to evoke body sensations which initially are accompanied by anxiety, but which gradually dissipate in intensity when people do not try to escape or avoid the sensations. Examples of provoking body sensations include hyperventilating, spinning, holding one's breath, and gagging by brushing the back of the tongue. While the initial reaction may be fearful, there is a gradual anxiety reduction and realization that these sensations are in fact not dangerous.

As was highlighted earlier, introducing ET to a HA patient requires a careful, skillful, and gradual approach by the therapist. The key to successful implementation of ET involves sensitivity and recognition on the part of the therapist to the level of tolerance of each individual patient. Too much exposure introduced too quickly may result in a dramatic reluctance by the patient to continue with the therapy. In addition, it is usually useful to provide a rational explanation for the exposure before it is introduced, perhaps in conjunction with a non health-related circumstance. For example, exposure to feared animals, elevators, or airplanes may also require a gradual introduction for effective anxiety reduction. Illustrating the methodology in these situations may enable patients to more readily accept similar methods in reducing HA. The goal is to gradually weaken the connection between the stimulus situation and the associated anxiety. Repeated confrontation of these situations without avoiding, escaping, or seeking reassurance leads to a reduction and potential elimination of the anxiety. The role of the therapist is to guide and coach the patient through the exposure experience.

RESPONSE PREVENTION

Response prevention (RP) simply means that HA patients are urged to resist safety-seeking behaviors such as checking their bodies, seeking reassurance from doctors and other people in their life, and the avoidance of situations and sensations that are associated with anxiety. RP is usually done throughout the four steps of the program but especially during the exposure therapy phase when anxiety is likely to be most intense – before it gets better. A trusting relationship between therapist and patient is most helpful in this effort. The methodology for RP is basically encouragement, support, empathy for the patient's distress, and recognition of how difficult it is for many people to overcome their long – standing fear. Patients can be reminded about how the health anxiety originally developed in them and how they are becoming better able to have greater understanding and appreciation of their struggles. When patients do revert back to safety-seeking behaviors, the therapist can guide them back to a more constructive path toward greater anxiety reduction. Movement back and forth from safety-seeking to confrontation is often inevitable in many patients and is best handled by understanding, acceptance and providing direction for continued constructive change of health related behavior.