SUICIDE

No one commits suicide out of joy it is the psychological pain and agony that one wants to avoid.

Suicide has been observed throughout the history. It has been recorded among the ancient Chinese, Greeks, and Romans. And in more recent times, suicides by such famous people as Ernest Hemingway and Marilyn Monroe have both shocked and fascinated society.

Today suicide ranks among the top ten causes of death in Western society. According to the World Health Organization, approximately 120,000 deaths by suicide occur each year. More than 30,000 suicides are committed annually in the United States alone, by 12.8 out of every 100,000 inhabitants, accounting for almost 2 percent of all deaths in the nation (McIntosh, 1991; National Center for Health Statistics, 1988). It is also estimated that each year more than 2 million other persons throughout the world- 600,000 in the United States- make unsuccessful attempts to kill themselves; these people are called parasuicides (McIntosh, 1991).

What is Suicide?

One of the most influential writers on this topic defines *suicide* as an intentioned death- a self-inflicted death in which one makes an intentional, direct, and conscious effort to end one's life. Most theorists agree that the term "suicide" should be limited to deaths of this sort.

Intentioned deaths may take various forms. Consider the following three imaginary instances. Although all of these people intended to die, their precise motives, the personal issues involved, and their suicidal actions differed greatly.

Precipitating Factors in Suicide

i) Stressful Events and Situations

Researchers have repeatedly counted more undesirable events in the recent lives of suicide attempters than in those of matched control subjects. In one study, suicide attempters reported twice as many stressful events in the year before their attempt as non-suicidal depressed patients or non-depressed psychiatric patients. An attempt may be precipitated by a single recent event or, a series of events that have combined impact.

ii) Abusive Environment

Suicide is sometimes committed by victims of an abusive or repressive environment from which there is little or no hope of escape. Prisoners of war, victims of the Holocaust, abused spouses, and prison inmates have attempted to end their lives. Like those who have serious illnesses, these people may have been in constant psychological or physical pain, felt that they could endure no more suffering, and believed that there was no hope for improvement in their condition

iii) Occupational Stresses

Certain jobs create ongoing feelings of tension or dissatisfaction that can precipitate suicide attempts.

Research has found particularly high suicide rates among psychiatrists and psychologists, physicians, dentists, lawyers and unskilled laborers.

iv) Role Conflict

Another long-term stress linked to suicide is role conflict. Everyone occupies a variety of roles in life. The role of a spouse, employee, parent and colleague are some of the few to name. These different roles maybe in conflict with one another and they may cause considerable stress. In recent years researchers have found that women who hold jobs outside of the home often experience role conflicts-conflicts between their family demands and job requirements, for example, or between their social needs and vocational goals- and that these conflicts are reflected in a higher suicide rate.

v) Mood and Thought Changes

Many suicide attempts are preceded by a shift in the person's mood and thought. Although these shifts may not be severe enough to warrant a diagnosis of a mental disorder, they typically represent a significant change from the person's past mood or point of view.

"No one commits suicide out of joy. Pain is what the suicidal person seeks to escape".

In the cognitive realm, many people on the verge of suicide frequently develop a sense of hopelessness- a pessimistic belief that their present circumstances, problems, and negative will not change.

vi) Alcohol Use

Studies indicate that between 20 and 90 percent of those who commit suicide drink alcohol just before the act (Hirschfeld & Davidson, 1988). Autopsies reveal that about one-fifth of these people are intoxicated at the time of death.

vii) Mental Disorders

As we noted earlier, people who attempt suicide do not necessarily have a mental disorder. On the other hand, between 30 and 70 percent of all suicide attempters do display a mental disorder.

VIEWS ON SUICIDE

i) The Psychodynamic View

Psychodynamic theorists believe that suicide usually results from a state of depression and a process of self- directed anger. This theory was first stated by Wilhelm Stekel at a meeting in Vienna in 1910, when he proclaimed that "no one kills himself who has not wanted to kill another or at least wished the death of another".

Freud (1917) and Abraham (1916,1911) proposed that when people experience the real of symbolic loss of a loved one, they come to "introject" the lost person; that is, they unconsciously incorporate the person into their own identity and feel toward themselves as they had felt toward the other.

ii) The Biological View

Until the 1970s the belief that biological factors contribute to suicidal behavior was based primarily on family studies. Researchers repeatedly found higher rates of suicidal behavior among the parents and close relatives of suicidal people than among those of nonsuicidal people, suggesting that genetic, and biological, factors were at work. Studies of twins also were consistent with this view of suicide (Lester, 1986). A study of twins born in Denmark between 1870 and 1920, for example, located nineteen identical pairs and fifty- eight fraternal pairs in which at least one of the twins had committed suicide. In four of the identical pairs the other twin also committed suicide (21 percent), while the other twin never committed suicide among the fraternal pairs.

Suicide in Different Age Groups

The likelihood of committing suicide generally increases with age, although individuals of all ages may try to kill themselves. Recently particular attention has been focused on self-destruction in three age groups- *children*, partly because suicide at a very young age contradicts society's perception that childhood is an enjoyable period of discovery and growth; *adolescents and young adults,* because of the steady and highly publicized rise in their suicide rate; and the *elderly*, because suicide is more prevalent in this age group than any other.

Adolescents and Young Adults

Suicidal actions become much more common after the age of 14 than at any earlier age. In the United States more than 6,000 adolescents and young adults kill themselves each year; that is, more than 13 of every 100,000 persons between the age of 15 and 24 (Center for Disease Control, 1987).

Teenagers

Approximately 3,000 teenagers commit suicide in the United States each year, and as many as 250,000 may make attempts. Moreover, in a recent Gallup Poll (1991) a full third of teenagers surveyed said they had considered suicide, and 15 percent said they had thought about it seriously.

Some of the major warning signs of suicide in teenagers are tiredness and sleep loss, loss of appetite, mood changes, decline in school performance, withdrawal, increased smoking, drug or alcohol use, increased letter to friends, and giving away valued possessions

College Students

The suicide rate tends to be higher for 18-to-24 -year-old college students than for other young people in the same age range. Again, female students are more likely to attempt suicide, but fatal suicides are more numerous among males. Furthermore, studies suggest that as many as 20 percent of college students have suicidal thoughts at some point in their college career (Carson & Johnson, 1985).

Rising Suicide Rate

The suicide rate for adolescents and young adults is not only high but increasing. The suicide rate for this age group has more than doubled. Several theories, each pointing to societal changes, have been proposed to explain why the suicide rate among adolescents and young adults has risen dramatically during the past few decades. First, noting the overall rise in the number and proportion of adolescents and young adults in the general population Paul Holinger and his colleagues (1991, 1988, 1987, 1984, 1982) have suggested that the competition for jobs, college positions, and academic and athletic honors keeps intensifying in this age group, leading increasingly to shattered dreams and frustrated ambition, which in turn lead to suicidal thinking and behavior.

Treatment and Suicide

Treatment of people who are suicidal falls into two major categories: (1) Treatment after suicide has been attempted and

(2) Suicide prevention.

Today special attention is also given to relatives and friends (Carter & Brooks, 1991; Farberow, 1991) whose bereavement, guilt, and anger after a suicide fatality or attempt can be intense. Although many people require psychotherapy or support groups to help them deal with their reaction to a loved one's suicide, the discussion here will be limited to the treatment afforded suicidal people themselves.

I) Treatment after Suicide Attempt

After a suicide attempt, the victims' primary need is medical care. Some are left with severe injuries, brain damage, or other medical problems. Once the physical damage is reversed, or at least stabilized, a process of psychotherapy may begin. Unfortunately, even after trying to kill themselves, many suicidal people fail to become involved in therapy.

II) Suicide Prevention

During the past thirty years emphasis has shifted from suicide treatment to suicide prevention. The emphasis on suicide prevention is labeled as suicide prevention programs.

In addition, many mental health centers, hospital emergency rooms, pastoral counseling centers, and poison control centers now include suicide prevention programs among their services.

Suicide prevention centers define suicidal people as people in crisis –that is, under great stress, unable to cope, feeling threatened or hurt, and interpreting their situations as unchangeable.

Accordingly, the centers try to help suicidal people perceive things more accurately, make better decisions, act more constructively, and overcome their crisis. Because crises can occur at any time, the centers have 24-hour-a-day telephone service ("hot lines") and also welcome clients to walk in without appointments. Those who call reach a counselor, typically a paraprofessional –a person without previous professional training who provides services under the supervision of a mental health professional (Heilig et al., 1983).

Although specific features vary from center to center, the general approach used by the Los Angeles Suicide Prevention Center reflects the goals and techniques of many of them. During the initial contact, the counselor has several tasks: establishing a positive relationship, understanding and clarifying the problem, assessing suicide potential, assessing and mobilizing the caller's resources, and formulating a plan to overcome the crisis.

The Effectiveness of Suicide Prevention

Do suicide prevention centers reduce the number of suicides in a community? Clinical researchers do not know. It is important to note, however, that the increase in suicide rates found in some studies may reflect society's overall increase in suicidal behavior. One investigation found that although suicide rates did increase in certain cities with prevention centers, they increased *even more in cities* without such centers.

After trying to kill themselves, some suicidal people receive therapy. The goal of therapy is to help the client achieve a non-suicidal state of mind and develop more constructive ways of handling stress and solving problems. Various therapy systems and formats have been employed.

Over the past thirty years, emphasis has been shifted form suicide treatment to suicide prevention because the last opportunity to keep many suicidal people alive comes before their first attempt. Suicide prevention programs generally consist of 24-hour-a-day "hot lines" and walking centres operated by paraprofessionals. During their initial contact with someone considered suicidal, these counsellors seek to establish a positive relationship, to understand and clarify the problem, to assess the suicide potential, to assess and mobilize the caller's resources, and to formulate a plan for overcoming the crisis. Although such crisis intervention may be sufficient treatment for some suicidal people, longer-term therapy is needed for up to 60 percent of them. Apparently, only a small percentage of suicidal people contact prevention centres.

While clinical scientists know a great deal about suicide, they do not yet fully comprehend why people kill themselves. Furthermore, myths about suicide and suicide intervention abound, perhaps contributing to tragedies that might otherwise be averted.

What is stress?

**STRESS I**

Stress is a process of adjusting to circumstances that disrupt or threaten a person’s equilibrium. Scientists define stress as any challenging event that requires physiological, cognitive, or behavioral adaptation.

Why study stress?

Scientists once thought that stress contributed only to a few physical diseases, like ulcers, migraine headaches, hypertension (high blood pressure), asthma, and other psychosomatic disorders, a term indicating that a disease is a product of both the *psyche* (mind) and the *soma* (body).

Today, the term “psychosomatic disorder” is old-fashioned.

How stress effects us?

Medical scientists now view *every* physical illness—from colds to cancer and AIDS—as a product of the interaction between the mind and body.

Behavioral medicine is a multidisciplinary field that includes both medical and mental health professionals who investigate psychological factors in the symptoms, cause, and treatment of physical illnesses. Psychologists who specialize in behavioral medicine often are called health psychologists*.*

Learning more adaptive ways of coping responses aimed at diminishing the burden of stress, can limit the recurrence or improve the course of many physical illnesses.

Examples

1- A works at an office for ten hours a day, in her office on most days of the week there is no electricity, even when there is electricity the AC does not work. By the end of the day the A is tired, depressed, hot and irritable.

2- Mr. x is waiting for an important job interview, he hopes to get the job with his charming manners and personality because his grades are average his mouth is dry, his heart beats faster, sweat breaks out on his forehead.

3- I have pain in my tooth , I need to see my dentist but the very thought of his dental clinic makes me shiver, I am nervous, I sweat, my heart beats faster and I have all sorts of strange feelings in my stomach.

All of these three examples on stress involve a relationship between people and their environments or between stressors and stress reactions.

Stressors are events and situations to which people adjust (exam, job interview, an operation). Stress reactions are the physiological, cognitive and behavioral responses that people display to stress (nausea, nervousness and tired).

Major stressors may be the pleasant events such as promotion more responsibility and wedding also acts as stressors. The unpleasant events such as being fired at work, retirement, death of a loved one, divorce etc are events that involve frustration, pressure, boredom, trauma, conflict, or change.

How do we measure stress?

We have psychological tests like

1- The Social Readjustment Rating Scale (SRRS)

2- The Daily Hassles and Uplifts Scale

Thomas Holmes and Richard Rahe in the SRRS, included a wide range of change related stressors in the 43 items of SRRS developed in 1967. They asked people to rate these 43 stressors in terms of life change units that is the amount of change and demand for adjustments, these given stressors introduce into an individual’s life. In the daily hassles and uplifts scale the respondent is asked to identify which of these items in the list she experienced in the past month and to rate them on a three point scale. Hassles include losing things or getting late for work. Uplifts include saving money, eating out, relaxing and getting a present.

Scientists continue to debate whether stress is best defined as

1- Stress as a Life Event itself

2- Stress as A*ppraisal* of Life Events, the event plus the individual’s reaction to it.

.1- Stress as a Life Event

Researchers often define stress as a life event—a difficult circumstance regardless of the individual’s reaction to it. For example, Holmes and Rahe’s Social Readjustment Rating Scale (SRRS) assigned stress values to life events based on the judgments of a large group of normal adults. The SRRS views stressors that produce more *life change units* as causing more stress. Researchers consistently link stress ratings on the SRRS and similar instruments to a variety of physical illnesses. The same stressor does have different meanings for different people. Because of this variability, many experts believe stress must be defined by the combination of an event plus each individual’s reaction to it.

2- Stress as Appraisal of Life Events

i- Richard Lazarus defined stress by the individual’s appraisal (perception) of a challenging life event. Your primary appraisal is your assessment of the challenge, threat, or harm posed by a particular event. Your secondary appraisal is your assessment of your abilities and resources for coping with that event.

The appraisal approach recognizes that the same event is more or less stressful for different people.

ii- The renowned American physiologist Walter Cannon, one of the first and foremost stress researchers, recognized the adaptive, evolutionary aspects of stress. Cannon viewed stress as the activation of the fight or flight response. The fight or flight response has obvious survival value. Cannon observed, however, that fight or flight is a *maladaptive* reaction to much stress in the modern world such as being reprimanded by your boss or giving a speech before a large audience.

Psychophysiological Responses to Stress

Physiologically, the fight or flight response activates your *sympathetic nervous system:* Your heart and respiration rates increase, blood pressure rises, your pupils dilate, blood sugar levels elevate, and your blood flow is redirected in preparation for muscular activity. When a perceived threat registers in the cortex, it signals*,* the brain structure primarily responsible for activating the stress response, which in turn secretes a hormone that stimulates the brainstem to activate the sympathetic nervous system. In response to the sympathetic arousal, the *adrenal glands* release two key hormones.

• One is commonly known as adrenaline, which activates the sympathetic nervous system.

• The second key adrenal hormone is cortisol, often called the “stress hormone” because its release is so closely linked with stress.

One function of cortisol is “containment” of pathogens in the body. In fact, research in this area has started a new field of study, psychoneuroimmunology (PNI), the investigation of the relation between stress and immune function. PNI research shows that particularly vulnerable to stress are *T cells,* one of the two major types of *lymphocytes,* white blood cells that fight off *antigens,* foreign substances like bacteria that invade the body. Decreased T cell production makes the body more susceptible to infectious diseases during times of stress. Recent evidence suggests that stress may both inhibit and enhance immune functioning.

Short-term stressors and physical threats enhance certain immune responses, particularly aspects of immune functioning that respond quickly, require little energy, and may contain infection due to an injury.

When repeated over the time, your physiological reactions to stress can leave you vulnerable to illness.

Cannon hypothesized this occurs because intense or chronic stress overwhelms the body’s homeostasis (a term he coined), the tendency to return to a steady state of normal functioning. He suggested that, over time, the prolonged arousal of the sympathetic nervous system eventually damages the body, because it no longer returns to its normal resting state.

Canadian physiologist Hans Selye offered a different hypothesis based on his concept of the general adaptation syndrome (GAS). Seyle’s GAS consists of three stages: alarm, resistance, and exhaustion. The stage of *alarm* occurs first and involves the mobilization of the body in reaction to threat. The stage of *resistance* comes next and is a period of time during which the body is physiologically activated and prepared to respond to the threat. *Exhaustion* is the final stage, and it occurs if the body’s resources are depleted by chronic stress. Selye viewed the stage of exhaustion as the key in the development of physical illness from stress. At this stage, the body is damaged by continuous failed attempts to reactivate the GAS. Stress may create physical illness in both ways, but a third mechanism may be as important. Because the stress response uses so much energy, the body may not be able to perform many routine functions, such as storing energy or repairing injuries. The result is greater susceptibility to illness.

Coping

Two general coping strategies are problem-focused and emotion-focused coping.

Problem-focused coping involves attempts to change a stressor.

Emotion-focused coping is an attempt to alter internal distress.

Studies of animals and humans show that *predictability* and *control* can dramatically reduce stress. Even the *illusion* of control can help to alleviate stress in humans. However, the perception of control can increase stress when people believe they can exercise control but fail to do so, or when they lose control over a

formerly controllable stressor. In short, control alleviates stress when it can be exercised or even when it is illusory, but failed attempts at control intensify stress. Research also indicates that responding with physical activity reduces physiological reactions to stress.

*Repression* is one form of emotion-focused coping that can be maladaptive physically.

Psychophysiological reactions to stress also are greater for “defensive deniers”—people who report positive mental health but whom clinicians judge to have emotional problems.

Optimism

Optimism is a basic key to effective coping. People with an optimistic coping style have a positive attitude toward dealing with stress, even when it cannot be changed, while pessimists are defeated from the outset. Positive thinking is linked with better health habits and less illness in general, and for those with heart disease, AIDS and other serious physical illnesses. For many people, religious and philosophical beliefs are essential to cope with stress. Emerging evidence demonstrates the health value of religious practices, for example, mortality risk is lower among those who attend church services, probably as a result of improved health behavior.

Health Behavior

Stress may also cause illness indirectly by disrupting healthy behavior. Health behavior is action that promotes good health, including positive efforts like eating, sleeping, and exercising adequately and avoiding unhealthy activities such as cigarette smoking, excessive alcohol consumption, and drug use. Illness behavior—behaving as if you are sick—also appears to be stress related. Considerable research indicates

that increased stress is correlated with such illness behaviors as making more frequent office visits to physicians or allowing chronic pain to interfere with everyday activities. Social support is important in coping with stress. Social support not only can encourage positive health behavior, but research shows that social support can have direct, physiological benefits. Of all potential sources of social support—or conflict—a good marriage may be most critical to physical health.

Illness as a Cause of Stress

Stress can cause illness, but illness also causes stress. Helping children, adults, and families cope with chronic illness is another important role of experts in behavioral medicine. Historically, the only physical illnesses thought to be affected by stress were a few psychosomatic disorders, such as ulcers and asthma. The field of psychosomatic medicine was dominated by psychoanalytic psychiatrists who endorsed the idea that specific personality types caused specific psychosomatic diseases.

At the beginning of the twentieth century, infectious diseases were the most common causes of death in the United States. Thanks to advances in medical science, and especially in public health, far fewer people are dying of infectious diseases at the beginning of the twenty-first century. Today, most of the leading causes

of death are *lifestyle diseases* that are affected in many ways by stress and health behavior.

What is stress?

STRESS II

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How stress effects us?

Medical scientists now view *every* physical illness—from colds to cancer and AIDS—as a product of the interaction between the mind and body.

Stressors and Stress Reactions

Stressors are events and situations to which people adjust (exam, job interview, an operation). Stress reactions are the responses to stress which can be physiological, cognitive and behavioral.

Examples: nausea, nervousness and tired.

Psychophysiological Responses to Stress

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Positive thinking is linked with better health habits and less illness in general, and for those with heart disease, AIDS and other serious physical illnesses.

Health Behavior

Stress may also cause illness indirectly by disrupting healthy behavior.

Health behavior is action that promotes good health, including positive efforts like eating, sleeping, and exercising adequately and avoiding unhealthy activities such as cigarette smoking, excessive alcohol consumption, and drug use.

Stress may also be related to the very important health behavior of following medical advice, something that as many as 93 percent of all patients *fail* to do fully.

*Illness behavior*—behaving as if you are sick—also appears to be stress related.

Considerable research indicates that increased stress is correlated with such illness behaviors as making more frequent office visits to physicians or allowing chronic pain to interfere with everyday activities.

The fact that many people consult physicians for psychological rather than physical concerns underscores the value of *social support* in coping with stress.

Social support not only can encourage positive health behavior, but research shows that social support can have direct, physiological benefits.

Of all potential sources of social support—or conflict—a good marriage may be most critical to physical health.

Stress can cause illness, but illness also causes stress.

Helping children, adults, and families to cope with chronic illness is another important role of experts in behavioral medicine or health psychologists.

At the beginning of the twentieth century, infectious diseases were the most common causes of death in the

United States.

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Today, most of the leading causes of death are *lifestyle diseases* that are affected in many ways by stress and health behavior.

1- Cancer

• Cancer is the second leading cause of mortality in the United States today, accounting for 23 percent of all deaths.

• Psychological factors are associated with the course of cancer.

• All cancer patients often are anxious or depressed, and their negative emotions can lead to increase in negative health behavior such as alcohol consumption and decrease in positive health behavior such as exercise.

• Cancer patients who are emotionally more expressive have fewer medical appointments, better quality of life, and better health status.

• The absence of social support also can undermine compliance with unpleasant but vitally important medical treatments for cancer.

• Some research also indicates that stress may *directly* affect the course of cancer.

• Adverse effects on the immune system may explain how stress may exacerbate the course of cancer.

• Various psychological treatments have been offered to cancer patients in an attempt to improve their quality of life.

2- Acquired Immune Deficiency Syndrome (AIDS)

Acquired immune deficiency syndrome (AIDS) is caused by the human immunodeficiency virus (HIV), which attacks the immune system and leaves the patient vulnerable to infection, neurological complications, and cancers that rarely affect those with normal immune function.

Behavioral factors play a critical role in the transmission of AIDS.

Scientists and policymakers have launched large-scale media campaigns to educate the public about HIV and AIDS and to change risky behavior.

Recent evidence has linked increased stress with a more rapid progression of HIV, and the availability of social support is associated with a more gradual onset of symptoms.

3- Pain Management

Some evidence links reports of increased pain with depression and anxiety, and conversely, higher levels of positive affect predict lower levels of reported pain.

People who are anxious or depressed may be more sensitive to pain, less able to cope with it, and more willing to complain than are people who have similar levels of suffering.

Psychologists have tried a number of treatments to reduce pain.

Direct treatments include hypnosis, biofeedback, relaxation training, and cognitive therapy.

Researchers report a degree of success with each of these approaches, but pain reduction typically is modest.

As a result, most current efforts focus on *pain management,* not pain reduction.

The goal of pain management is to help people to cope with pain in a way that minimizes its impact on their lives, even if the pain cannot be eliminated or controlled entirely.

4- Sleep Disorders

In 1994, DSM first included a diagnostic category for primary sleep disorder, a condition where the difficulty in sleeping is the principal complaint.

Two types of primary sleep disorders are listed in DSM-IV-TR.

Dysomnias are difficulties in the amount, quality, or timing of sleep.

Parasomnias are characterized by abnormal events that occur during sleep, for example, nightmares.

The dyssomnias include primary insomnia, primary hypersomnia, narcolepsy, breathing-related sleep disorder, and circadian rhythm sleep disorder.

Primary insomnia involves difficulties initiating or maintaining sleep, or poor quality of sleeping (e.g.,restless sleep) that last for at least a month and significantly impair life functioning.

Effective treatments have been developed for insomnia that involve stimulus control (only staying in bed

during sleep) and resetting circadian rhythms by going to bed and getting up at set times, as well as not napping, regardless of the length of sleep.

Primary hypersomnia is excessive sleepiness characterized by prolonged or daytime sleep, lasting at least a month and significantly interfering with life functioning.

Primary hypersomnia is similar to narcolepsy*,* irresistible attacks of refreshing sleep, lasting at least 3 months.

Breathing related sleep disorder involves the disruption in sleep due to breathing problems such as sleep apnea, the temporary obstruction of the respiratory airway.

Circadian rhythm sleep disorder is a mismatch between the patients’ 24-hour sleeping patterns and their 24-hour life demands that causes significant life distress.

The parasomnias include nightmare disorder, sleep terror disorder, and sleepwalking disorder. People with nightmare disorder are frequently awakened by terrifying dreams.

Sleep terror disorder also involves abrupt awakening from sleep, typically with a scream, but it differs from nightmare disorder in important respects.

People with nightmare disorder recall their dreams and quickly orient to being awaken; people with sleep terror disorder recall little of their dreams, show intense autonomic arousal, and are difficult to soothe. Moreover, a person with sleep terror typically returns to sleep fairly quickly and recalls little, if anything happen, about the episode the following morning.

Sleepwalking disorder involves rising from the bed during sleep and walking about in a general unresponsive state.

Occasional episodes of sleepwalking are fairly common, especially among children.

Like all sleep disorders, sleepwalking disorder tends to be diagnosed only if it causes significant distress or impairs the person’s ability to function.

5- Cardiovascular disease (CVD)

Cardiovascular disease (CVD) is a group of disorders that affect the heart and circulatory system.

The most important of these illnesses are hypertension (high blood pressure) and coronary heart disease (CHD).

The most deadly and well-known form of coronary heart disease is myocardial infarction (MI), commonly called a heart attack.

Hypertension increases the risk for CHD, as well as for other serious disorders, such as stroke. Cardiovascular disorders are the leading cause of mortality not only in the United States, where they account for over one-third of all deaths, but also in most industrialized countries.

An individual’s risk for developing CVD, and particularly CHD, is associated with a number of health behaviors, including weight, diet, exercise, and cigarette smoking.

In addition to health behavior, personality styles, behavior patterns, and forms of emotional expression appear to contribute directly to the development of CVD.

Symptoms of Hypertension and CHD

Hypertension is often referred to as the “silent killer” because it produces no obvious symptoms.

Generally, hypertension is defined by a systolic reading above 140 and/or a diastolic reading above 90 when measured while the patient is in a relaxed state.

Diagnosis of CVD

Myocardial infarction and angina pectoris are the two major forms of coronary heart disease.

Angina pectoris involves intermittent chest pains that are usually brought on by some form of exertion. Attacks of angina do not damage the heart, but the chest pain can be a sign of underlying pathology that puts the patient at risk for a myocardial infarction.

MI (heart attack) does involve damage to the heart, and as noted, it often causes sudden cardiac death*,* which is usually defined as death within 24 hours of a coronary episode.

Hypertension can be primary or secondary.

Secondary hypertension results from a known problem such as a diagnosed kidney or endocrine disorder.

It is called secondary hypertension because the high blood pressure is secondary to—that is, a consequence of—the principal physical disorder.

Primary or essential hypertension is the major concern of behavioral medicine and health psychology. In case of essential hypertension, the high blood pressure is the principal disorder.

Multiple physical and behavioral risk factors contribute to the elevated blood pressure.

Frequency of CVD

Men are twice as likely to suffer from CHD as are women, and sex differences are even greater with more severe forms of the disorder.

For men, risk for CHD increases in a linear fashion with increasing age after 40.

For women, risk for CHD accelerates more slowly until they reach menopause and increases sharply afterwards.

Rates of CHD also are higher among low-income groups, a finding that likely accounts for the higher rates of CHD among black than among white Americans.

Finally, a positive family history is also linked to an increased risk for CHD, due at least in part to genetic factors.

The risk for CHD is two to three times greater among those who smoke a pack or more of cigarettes a day. Obesity, a fatty diet, elevated serum cholesterol levels, heavy alcohol consumption, and lack of exercise also increase the risk for CHD.

CHD also is associated with psychological characteristics, including depression.

About 30 percent of all U.S. adults suffer from hypertension, and many of the same risk factors that predict CHD also predict high blood pressure, including genetic factors, a high-salt diet, health behavior, and lifestyle factors.

Hypertension is more common in industrialized countries; and in the United States, high blood pressure is found with greater frequency among men, African Americans, low-income groups, and people exposed to high levels of chronic life stress.

Causes of CVD

• The immediate cause of CHD is the deprivation of oxygen to the heart muscle.

• No permanent damage is caused by the temporary oxygen deprivation (*myocardial ischemia*) that accompanies angina pectoris, but part of the heart muscle dies in cases of myocardial infarction.

• Oxygen deprivation can be caused by temporarily increased oxygen demands on the heart, for example, as a result of exercise.

• More problematic is when atherosclerosis causes the gradual deprivation of the flow of blood (and the oxygen it carries) to the heart.

• The immediate biological causes of hypertension are less well understood, as are the more distant biological causes of both hypertension and CHD.

• A positive family history is a risk factor for both hypertension and CHD, and most experts interpret this as a genetic contribution.

• However, research using animal models of CVD suggests that heritable risk interacts with environmental risk.

• The most important of the known psychological contributions to CVD are the wide variety of health behaviors that (1) have a well-documented association with heart disease; (2) decrease the risk for CVD when they are modified; and (3) often are difficult to change.

• Improved health behavior—including avoiding or quitting smoking, maintaining a proper weight, following a low-cholesterol diet, exercising frequently, monitoring blood pressure regularly, and taking antihypertensive medication as prescribed—can reduce the risk of heart disease.

• Stress also contributes to CVD, in two different ways.

• First, stress taxes the cardiovascular system through increased heart rate and blood pressure and can precipitate immediate symptoms or broader episodes of CHD.

• Second, over the long run, the heart may be damaged by constant stress.

• We consider four areas that this can happen: cardiovascular reactivity to stress, actual exposure to life stress, characteristic styles of responding to stress, and depression and anxiety.

• In a study of patients with coronary artery disease, patients who reacted to mental stress in the laboratory with greater myocardial ischemia (oxygen deprivation to the heart) had a higher rate of fatal and nonfatal cardiac events over the next 5 years in comparison to their less reactive counterparts.

• In fact, mental stress was a better predictor of subsequent cardiac events than was physical stress(exercise testing).

• Research shows that exposure to chronic stress increases risk for cardiovascular disease.

• Several studies have found a relationship between job strain and CHD.

• Such strains are not limited to employment, but include work that is performed in other life roles.

• Characteristic styles of responding to stress may also increase the risk for CVD, particularly the

Type A behavior pattern—a competitive, hostile, urgent, impatient, and achievement-striving style of responding to challenge.

• Type B individuals, in contrast, are more calm and content.

• The National Blood, Heart, and Lung Institute concluded in 1981 that Type A was a risk factor for

CHD, independent of other risks, for example, diet.

• Many studies conducted since 1980 have failed to support earlier findings.

• *Hostility* predicts future heart disease better than other aspects of Type A behavior or the pattern as a whole.

• Depression is three times more common among patients with CHD than in the general population, and depression doubles the risk for future cardiac events.

• Anxiety seems to be associated with one crucial aspect of CHD: sudden cardiac death.

• Social factors can influence the risk for CVD in many ways.

• Friends and family members can encourage a healthy—or an unhealthy—lifestyle.

• Interpersonal conflict can create the anger and hostility that can increase the risk for coronary heart disease, whereas a spouse’s confidence in coping with heart disease predicts patients’ increases survival over 4 years.

• Economic resources, being married, and/or having a close confidant all predict a more positive prognosis among patients with coronary artery disease.

• Finally, societal values, such as attitudes about health behaviors like smoking and cultural norms about competition in the workplace also can affect the risk for CVD.

• CVD is an excellent example of the value of the systems approach.

• CVD is caused by a combination of genetic makeup, an occasional structural defect, maintenance in the form of health behavior, and how hard the heart is driven by stress, depression, coping, and societal standards.

Prevention and Treatment of CVD

• Several medications known as antihypertensive are effective treatments for reducing high blood pressure.

• Numerous public service advertisements attempt to prevent CVD by encouraging people to quit smoking, eat well, exercise, monitor their blood pressure, and otherwise improve their health behavior.

• The treatment of essential hypertension is one of the most important attempts at the secondary prevention of CHD.

• Treatments of hypertension fall into two categories.

• One focuses on improving health behavior, and the other emphasizes stress management, attempts to teach more effective coping skills.

• The major form of stress management used to treat hypertension is behavior therapy, particularly relaxation training and biofeedback.

• Biofeedback uses laboratory equipment to monitor physiological processes that generally occur outside conscious awareness and to provide the patient with conscious feedback about these processes.

• Biofeedback tries to teach the person to control the functions of their autonomic nervous system.

• Both relaxation training and biofeedback produce reliable, reductions in blood pressure.

• Unfortunately, the reductions are small, often temporary, and considerably less than those produced by antihypertensive medications.

• Overall, stress management appears to improve quality of life but has little effect on disease.

• Biofeedback is a particularly dubious treatment, one that some well-respected investigators suggest should be abandoned as a treatment for hypertension.

• The Trials of Hypertension Prevention (TOHP) is an important ongoing study of whether stress management and health behavior interventions succeed in lowering high blood pressure.

• Results from Phase I of the study indicated that only the weight reduction and the salt reduction programs were successful in lowering blood pressure over a follow-up period of up to 11.2 years.

• Findings from Phase II of the TOHP underscored the importance of weight loss, as even a modest reduction in weight lowered produced clinically significant reductions in blood pressure.

• The Multiple Risk Factor Intervention Trial (MRFIT) is another important investigation, of over 12,000 men at risk for CHD who were assigned at random to intervention and control groups.

• Carefully developed intervention programs, including both education and social support, produced improved health behavior, including reduced smoking and lower serum cholesterol.

• However, the men randomly assigned to the treatment groups did not have a lower incidence of heart disease during the 7 years following intervention.

• Tertiary prevention of CHD targets patients who have already had a cardiac event, typically a myocardial infarction.

• The hope is to reduce the incidence of recurrence of the illness.

• Exercise programs are probably the most common treatment recommended for cardiac patients, but evidence of their effectiveness is limited.

• The most effective programs are individualized for each patient.

• Some of the most optimistic evidence on the treatment of CHD comes from studies of interventions designed to alter the Type A behavior pattern, a somewhat surprising circumstance given the controversies about the risk research on Type A.

• Some valuable treatments focus on the effects of heart disease on life stress rather than the other way around.

• The link between stress and physical health clearly is a reciprocal one.

ACUTE AND POSTTRAUMATIC STRESS DISORDERS What is stress?

Stress is a process of adjusting to circumstances that disrupt or threaten a person’s equilibrium.

Scientists define stress as any challenging event that requires physiological, cognitive, or behavioral adaptation.

Stress is an inevitable, and in some cases a desirable, fact of everyday life.

Some stressors, however, are so catastrophic and horrifying that they can cause serious psychological harm. Such traumatic stress is defined in DSM-IV-TR as an event that involves actual or threatened death or serious injury to self or others and creates intense feelings of fear, helplessness, or horror.

1-Acute stress disorder (ASD) occurs within 4 weeks after exposure to traumatic stress and is characterized by dissociative symptoms, re-experiencing of the event, avoidance of reminders of the trauma, and marked anxiety or arousal.

2-Posttraumatic stress disorder (PTSD) is also defined by symptoms of re-experiencing, avoidance, and arousal, but in PTSD the symptoms either are longer lasting or have a delayed onset.

• Dissociation is the disruption of the normally integrated mental processes involved in memory, consciousness, identity, or perception.

• The DSM-IV-TR classifies PTSD as an anxiety disorder, however, PTSD is of unique importance and is characterized by mixed symptoms of anxiety and dissociation.

Symptoms of ASD and PTSD

1-People who have been confronted with a traumatic stressor *re-experience* the event in a number of different ways.

2-Many people with ASD or PTSD have repeated intrusive flashbacks, sudden memories during which the trauma is replayed in images or thoughts—often at full emotional intensity.

3-In rare cases, re-experiencing occurs as a *dissociative state,* and the person feels and acts as if the trauma actually were recurring in the moment.

4-Marked or persistent avoidance of stimuli associated with the trauma is another symptom of ASD and PTSD. Trauma victims may attempt to avoid thoughts or feelings related to the event, or they may avoid people, places, or activities that remind them of the trauma.

5- PTSD, the avoidance also may manifest itself as a general *numbing of responsiveness.* People suffering from PTSD often complain that they suffer from “emotional anesthesia”—their feelings seem dampened or even nonexistent.

6- Despite their general withdrawal from feelings, people, and painful situations, people with ASD and

PTSD also experience increased arousal and anxiety following the trauma, a symptom which predicts a worse prognosis when it is more severe.

7-A number of people with PTSD or ASD also have an *exaggerated startle response,* excessive fear reactions to unexpected stimuli, such as loud noises.

• Symptoms of anxiety and arousal are the reason why traumatic stress disorders are grouped with the anxiety disorders in DSM-IV-TR.

• Acute stress disorder is characterized by explicit dissociative symptoms.

• Many people become less aware of their surroundings following a traumatic event.

• They report feeling dazed, and they may seem “spaced out” to other people.

• 8-Other people experience *depersonalization,* feeling cut off from themselves or their environment.

People with this symptom may report feeling like a robot or as if they were sleepwalking.

• *9-Derealization* is characterized by a marked sense of unreality about yourself or the world around you.

• ASD also may be characterized by features of *dissociative amnesia,* specifically the inability to recall important aspects of the traumatic experience.

• DSM-IV-TR lists a sense of numbing or detachment from others as dissociative symptoms that characterize acute stress disorder.

• A very similar symptom is listed as an indicator of avoidance, not dissociation, in the diagnosis of PTSD.

• This discrepancy in diagnostic criteria reflects some of the broader controversy about whether ASD and PTSD should be classified as dissociative or anxiety disorders.

Diagnosis of ASD and PTSD

• Maladaptive reactions to traumatic stress have long been of interest to the military.

• Historically, most of the military’s concern has focused on battle dropout, that is, men who leave the field of action as a result of what has been called “shell shock” or “combat neurosis.”

• During the Vietnam War, however, battle dropout was less frequent than in earlier wars, but delayed reactions to combat were much more common.

• This change prompted much interest in PTSD, a condition first listed in the DSM in 1980 (DSM-III).

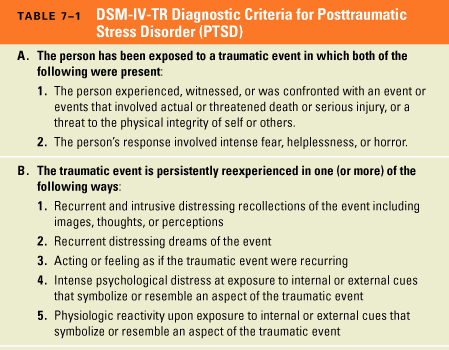
• The basic diagnostic criteria for PTSD—re-experiencing, avoidance, and arousal—have remained more or less the same in revisions of the DSM.

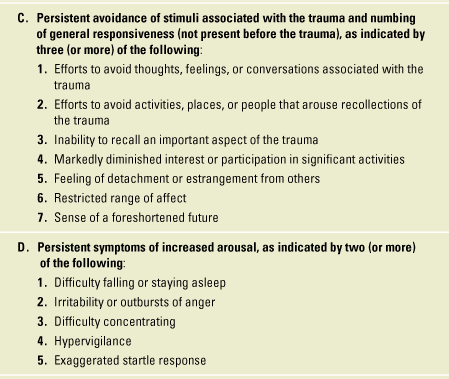
• However, two significant changes in the classification of traumatic stress disorders were made with the publication of DSM-IV in 1994: Acute stress disorder was included as a separate diagnostic category, and the definition of trauma was altered.

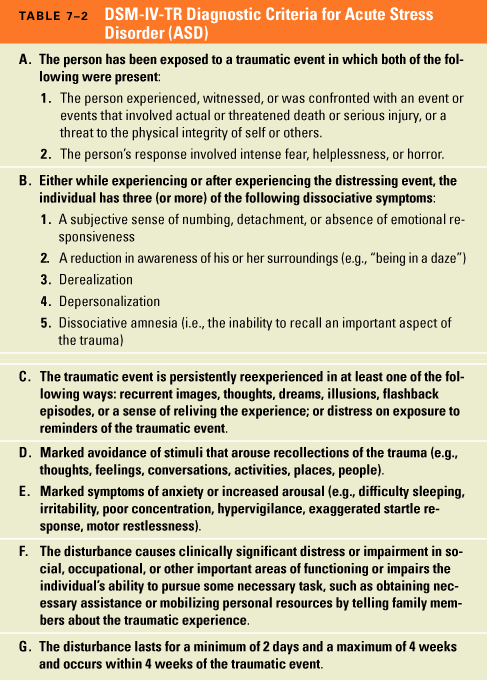
• The diagnostic criteria for ASD and PTSD are essentially the same.

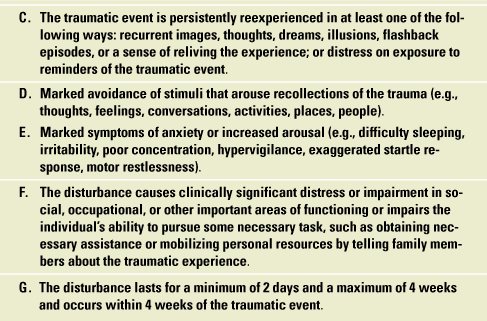
• The two exceptions are that ASD explicitly includes dissociative symptoms and lasts no longer than 4 weeks, whereas PTSD continues for at least 1 month after a trauma or it has a delayed onset.

• Not surprisingly, many people suffer from ASD after experiencing trauma, and the presence of ASD may predict future PTSD.









• Earlier versions of DSM defined trauma as an event “outside the range of usual human experience.

• Even before September 11, however, researchers discovered that, unfortunately, many traumatic stressors are a *common* part of human experience in the United States today.

• Thus DSM-IV-TR defines trauma as (1) the experience of an event involving actual or threatened death or serious injury to self or others and (2) a response of intense fear, helplessness, or horror in reaction to the event.

• The psychological effects of exposure to natural or man-made disasters, like September 11 or the

Oklahoma City bombing in 1995 are of great concern.

• September 11 also called attention to the trauma experienced by emergency workers.

Frequency of Trauma, PTSD, and ASD

1-The National Comorbidity Survey found that nearly 8 percent of people living in the United States will experience PTSD at some point in their lives, including about 10 percent of women and 5 percent of men.

2-Research finds that women are especially likely to develop PTSD as a result of rape, while combat exposure is a major risk factor for PTSD among men.

• PSTD is also commonly found among crime victims.

• Still, the single most common cause of PTSD is the sudden, unexpected death of a loved one.

• In general, trauma does not occur completely at random.

• The development of PTSD following a trauma is also not random.

• Researchers have found that people who suffer from ASD are more likely to develop PTSD

subsequently.

• The prediction is far from perfect, however, and two caveats bear special scrutiny.

• First, people with *subclinical* ASD, that is, with symptoms that are not severe or pervasive enough to meet diagnostic criteria, nevertheless are at greater risk for PTSD than trauma victims with relatively few psychological symptoms.

• Second, the different symptoms of ASD are not equally good in predicting future PTSD.

• The presence of three symptoms—numbing, depersonalization, and a sense of reliving the experience—are the best predictors of PTSD.

• Other research shows how the symptoms of PTSD diminish gradually as time passes.

• However, PTSD can be a chronic disorder.

• Scientists studying social factors and the risk for PTSD have focused primarily on (1) the nature of the trauma and the individual’s level of exposure to it and (2) the availability of social support following the trauma.

• Victims of trauma are more likely to develop PTSD when the trauma is more intense, life- threatening, and involves greater exposure.

• As with less severe stressors, social support after a trauma can play a crucial role in alleviating long- term psychological damage.

• A lack of social support is thought to have contributed to the high prevalence of PTSD found among Vietnam veterans.

• In an analysis of more than 4,000 twin pairs, researchers found that MZ twins had a higher concordance rate than DZ twins for experiencing trauma, specifically exposure to combat.

• Following exposure to trauma, identical twins also had higher concordance rates for PTSD

symptoms than did fraternal twins.

• A very different line of research focuses on the biological *consequences* of exposure to trauma and how these consequences may play a role in the maintenance of PTSD.

• People with PTSD show alterations in the functioning and perhaps even the structure of the amygdala and hippocampus, two biological findings consistent, respectively, with the experience of heightened fear reactivity and intrusive memories.

• Other evidence finds that PTSD is associated with increased levels of circulating norepinephrine and general psychophysiological arousal, for example, an increased resting heart rate.

• Together, the pattern of biological findings suggests that the sympathetic nervous system is aroused and the fear response is sensitized in PTSD.

• The heightened reactivity may be due to the failure of the stress response system to shut down.

• According to two-factor theory, classical conditioning *creates* fears when the terror inherent in trauma is paired with the cues associated with the traumatic event.

• Operant conditioning, in turn, *maintains* the fears.

• Specifically, when fear-producing situations are avoided, the avoidance is negatively reinforced by the reduction of anxiety.

• More recent psychological perspectives focus on individual differences in the risk for ASD and

PTSD.

• In addition to preexisting mental health problems, research indicates that cognitive factors such as expectancies, preparedness, and control influence the risk for PTSD following a trauma.

• Some theories suggest that dissociation is an unconscious defense that helps victims to cope with trauma.

• However, research indicates that dissociation is associated with more not less PTSD.

• Dissociation may not be adaptive, but most theorists agree that victims of trauma must, over time, find a balance between gradually facing their painful emotions while not being overwhelmed by them.

• Psychologist Edna Foa, a leading PTSD researcher, has highlighted the importance of *emotional processing,* which involves facing fear, diminishing its intensity, and coming to some new understanding about the trauma and its consequences.

• Integrating the experience of trauma with broader memories and beliefs involves the task of *meaning making*—finding some broader reason or higher value for enduring the trauma.

• The combined evidence suggests alternative pathways can lead to ASD and PTSD.

• Anyone might develop ASD or PTSD given a critical level of exposure and a trauma of sufficient intensity.

• The development of PTSD results from a combination of factors, including personality characteristics that predate the trauma, exposure during the trauma, and emotional processing and social support afterwards.

Prevention and Treatment of ASD and PTSD

• The potential for preventing PTSD is so important that the federal Emergency Management

Agency, the government agency that deals with natural and manmade disasters, is required to provide special funding to community mental health centers during disasters.

• Perhaps the most widely used early intervention is critical incident stress debriefing (CISD), a single

1 to 5 hour group meeting offered within 1 to 3 days following a disaster.

• CISD involves several phases where participants share their experiences, reactions, group leaders offer education, assessment, and referral if necessary.

• Since World War I, interventions with soldiers who drop out of combat have been based on the three principles of offering (1) immediate treatment in the (2) proximity of the battlefield with the (3) expectation of return to the front lines upon recovery.

• The trauma of combat and the structure of the military make generalization of these principles to other traumas difficult, but the goals are logical ones to modify to fit the unique circumstances of other traumas.

• Few studies of the treatment of ASD have been conducted, a circumstance that is not surprising given that the diagnosis was developed only recently.

• Nevertheless, some research indicates that structured interventions with ASD *can* lead to the prevention of future PTSD.

• Psychotherapists who specialize in PTSD suggest some general principles for the psychological treatment of the disorder.

In the order in which they are likely to be addressed in therapy, these include

1) Establishing a trusting therapeutic relationship

2) Providing education about the process of coping with trauma

3) Stress-management training

4) Encouraging the re-experience of the trauma and

5) Integrating the traumatic event into the individual’s experience.