

# HEALTH PSYCHOLOGY

Chapter no.11

## LIVING WITH CHRONIC ILLNES

Submitted to; Mam Samar Fahad

Submitted by; Laraib Ajmal

Roll no. 10

Class: BS (6<sup>th</sup>)

A series of five parallel blue lines of varying lengths, slanted diagonally from the bottom-left towards the top-right, located on the right side of the page.

Islamia University of Bahawalpur (IUB)  
Department of Applied Psychology

# Living with Chronic Illness

## The Impact of Chronic Diseases:

Nowadays long lasting chronic diseases such as heart disease or cancer are the common cause of death than short term acute diseases. Most of these chronic conditions are not severe as life threatening, but if fatal they cause death only after a lengthy period of illness. Chronic disease places an enormous physical and emotional burden on a patient, as well as a patient's family.

Crisis theory is one to attempt to explain the impact of disruption on established patterns of personal and social functioning. Crisis theory holds that individual needs to operate in a state of equilibrium. Crisis occurs when events are so unusual or major that habitual patterns of coping are inadequate, then people experience feelings of anxiety, fear, and stress. People cannot tolerate a crisis state for very long so they adopt new ways of coping. Crisis theory suggests that chronic illness would not inevitably bring about psychological distress.

## Impact on the Patient:

- Patients coping with chronic disease includes dealing with the symptoms of the disease, managing the stresses of treatment, living as normal a life as possible, and facing the possibility of death.
- Sick people begin to feel like “nonpersons” and to experience loss of personal control and threats to self-esteem.
- Being ill leads to feelings of vulnerability and loss of control over the future as well as changes in how others think of patients and how patients think about themselves.
- Research found that patients with chronic illness showed worse social and physical functioning, poor mental health, and greater pain than patients without chronic illness.
- Patients with more than one chronic disease showed greater decrements than patients with only one chronic disease.



- The diagnosis of a chronic disease changes self-perception such as changes in how people think of themselves.
- Patients' lives change after diagnosis and all patients think that their lives would never be the same.

- People adopt coping strategies to deal with their illness, including attempts to focus on the positive aspect of disease. Problem solving strategies are more successful than those who use avoidance strategies.
- Patients of chronic illness may have a hopeless and even helpless attitude toward their condition and their relationship with their physician.
- Negative emotions are common among chronically ill due to uncertain course of chronic disease and Physicians often feel inadequately prepared to help patients deal with these emotional reactions.



- Such deficits have led to two types of supplements:

**Psychological interventions;** for many chronic illness health psychologists have created interventions that emphasize the management of emotions such as anxiety and depression.

**Support groups;** Support groups also address emotional needs by providing emotional support to patients or family members who must confront an illness with little chance of a cure.

## Impact on the Family:

- Illness is a crisis not only for patients but also for their families.
- In adults, chronic illness may be a redefinition of identity and a change in relationship with others.
- In children, chronic illness also changes the lives not only of patient but also of the entire family, as parents and siblings try to normalize family life while coping with therapy for the sick child.
- An ill child require a great deal of emotional support, most of which is supplied by their mothers. These effort drained the mother that cause changes in her relationship with child's father.
- Chronic illness of one partner may also produces changes in the relation between married partners.



- Chronically ill parents can also experience changes that produce problem in their relationship with their young children; these changes most pronounced for children with a terminally ill parent. For example; children may avoid consulting a sick parent so as not to further burden the parent, leading to decreased closeness.
- Children role in the family may changes as a result of parent's illness.
- Families can follow several recommendations to facilitate adjustment to a chronic disease. Families can try to be flexible and establish a routine that is as close to normal as they can manage.



## Adjusting to Diabetes:

Dawn was diagnosed with diabetes mellitus when she was 4 years old. She remember being ostracized by other children during elementary school because they were afraid that playing with her would make them sick, too. She hid her condition during junior high and high school but her attempt to fit in with her peers led her to neglect her diabetes regimen.

## The Physiology of Diabetes:

The pancreas, located below the stomach, produces different types of secretions. The islet cells of the pancreas produce several hormones, two of which, glucagon and insulin, are critically important in metabolism.

- **Glucagon** stimulates the release of glucose and therefore acts to elevate blood sugar levels. The action of insulin is the opposite.
- **Insulin** decreases the level of glucose in the blood by causing tissue cell membranes to open so glucose can enter the cells more freely.

Disorders of the islet cells result in difficulties in sugar metabolism. Diabetes mellitus is a disorder caused by insulin deficiency.

The two **types of diabetes** mellitus are;

- (1) Insulin dependent diabetes mellitus (IDDM), also known as Type 1 diabetes,
- (2) Non-insulin-dependent diabetes mellitus (NIDDM), also known as Type 2 diabetes.

### Characteristics of Type 1 and Type 2 Diabetes Mellitus

Type 1	Type 2
Onset occurs before age 30	Onset may occur during childhood or adulthood
Patients are often normal weight or underweight	Patients are often overweight
Patients experience frequent thirst and urination	Patients may or may not experience frequent thirst and urination
Affects equal numbers of men and women.	Affects more women
Caused primarily by genetic factors	Caused by both lifestyle factors (poor diet, low physical activity, obesity) and genetic factors
Has no socioeconomic correlates	Affects more poor than middle-class people
Management involves insulin injections and dietary change	Management involves physical activity and dietary change, medication, and sometimes insulin injections
Carries risk of kidney damage	Carries risk of cardiovascular damage
Accounts for 10% of diabetics	Accounts for 90% of diabetics

## Impact of Diabetes:

The diagnosis of any chronic disease produces an impact on patients for two reasons:

- ✓ First, the emotional reaction to having a lifelong incurable disease, and
- ✓ Second, the lifestyle adjustments required by the disease.
  - For diabetes that begins during childhood, both children and their parents must come to terms with the child's loss of health and the management of the disorder, which includes careful restrictions in diet, insulin injections, and recommendations for regular exercise.

- Diabetics must test their blood sugar levels at least once (and possibly several times) a day, drawing a blood sample and using the testing equipment correctly. The results guide diabetics to appropriate levels of insulin. The daily (or more frequent) injections can be a source of fear and stress.



- Non-insulin-dependent (Type 2) diabetes does require lifestyle changes and oral medication. The components of treatment for Type 2 diabetes are behavioral methods for weight loss and a healthy diet.
- Type 2 diabetes is more likely to cause circulatory problems, leaving these individuals prone to cardiovascular problems, which is their leading cause of death.
- Diabetic women who become pregnant often have problem pregnancies
- Some diabetics deny the seriousness of their condition and ignore the need to restrict diet and take medication. They become dependent and rely on others to take care of them. All these reactions lead to serious health complications, including death.

## Impact of Asthma:

- About 23 million adults in the United States have asthma (7.7%), but the rate is highest for children and adolescents between 5 and 17 years old.

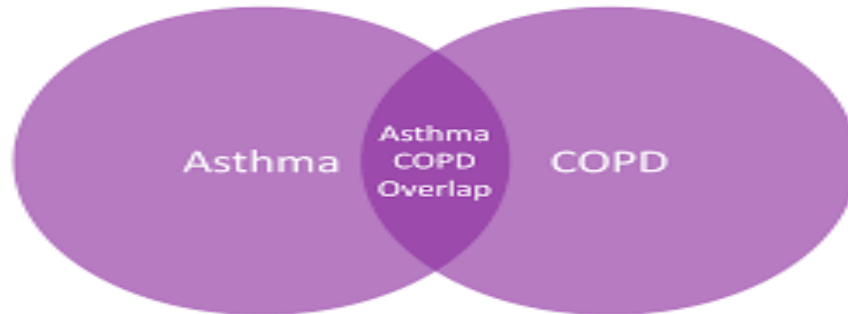


- The number of people with asthma grew throughout the 1980s and into the 1990s in the United States but began to decrease by the late 1990s.
- The death rate from asthma is not high, and that mortality rate has decreased in recent years, but asthma is the largest cause of disability among children and the leading cause of missed school days, making it a serious health problem in the United States.

## The Disease of Asthma:

Asthma is a chronic inflammatory disease that causes constriction of the bronchial tubes, preventing air from passing freely. People experiencing an asthma attack will wheeze, cough, and have trouble breathing; such an attack can be fatal but, at other times they appear to be fine.

**Asthma and COPD:** Asthma shares some features with chronic obstructive pulmonary diseases (COPD) such as chronic bronchitis and emphysema, but asthma also differs in some ways.



All of these conditions involve inflammation, though not to the same extent or through the same immune system mechanisms. But the most important difference is that people with COPD experience constant problems, whereas people with asthma may go for long periods of time without any problems in breathing.

- **Traditional view:** Asthma is an allergic reaction triggered by environmental allergens. These allergens include an assortment of common substances such as tobacco smoke, household dust (along with dust mites), cockroaches, animal dander, and environmental pollutants.
- **Diathesis–stress model view:** holds that a genetic vulnerability makes some infants' immune systems respond with an allergic reaction to substances in the environment that other infants' immune systems encounter without problems.
- **Hygiene hypothesis view:** holds that asthma is a result of the cleanliness that has become common in modern societies. Infants have undeveloped immune systems, and in hygienic environments they encounter too little dirt and too few bacteria, leaving their immune systems underprepared to deal with these substances. Exposure then leads to over responsiveness, which produces inflammation; this inflammation forms asthma.

**Other risk factors for asthma:** include sedentary lifestyle and obesity, depression

- **Sedentary lifestyle:** People take few deep breaths when they are sedentary, which may be the link between lack of exercise and asthma. In addition, staying indoors exposes people to some of the allergens that provoke asthma attacks.
- **Obesity:** The link between asthma and obesity is significant, Obese people are 2 to 3 times more likely to have asthma than non-obese people.



- **Depression:** Psychological factors also show a relationship with the development of asthma serving as predictors of its development and appearing as a result of living with the disease. Depression is a specific psychological factor that relates to asthma.

**Triggers:** Triggers are substances or circumstances that cause the development of symptoms. The **substances** include allergens such as mold, pollen, dust and dust mites, cockroaches, and animal dander; tobacco or wood smoke, and irritants such as air pollutants, chemical sprays, or other environmental pollution. The **circumstances** include exercise and emotional reactions such as stress or fear. Most people with asthma are sensitive to only a few of them.

## Managing Asthma:

- People with asthma require frequent contact with the health care system, can be life threatening, affect children and adolescents, impose restrictions on lifestyle, and pose substantial adherence problems.
- Minimizing attacks is the primary goal of managing asthma. Daily attention to symptoms and status improves the chances of avoiding attacks, and behaviors are critical.
- Managing asthma requires a variety of medications as well as learning personal triggers and avoiding them.
- When people with asthma have an attack, they have trouble breathing or cannot breathe. Gasping for breath, they either use a bronchodilator to inhale medication that relieves the symptoms or go to a hospital emergency room for treatment.
- Adhering to the medication and behavioral regimen to control this disorder is a challenge for people with asthma.



## Dealing With HIV and AIDS:

- **AIDS** is a disorder in which the immune system loses its effectiveness, leaving the body defenseless against bacterial, viral, fungal, parasitic, cancerous, and other opportunistic



diseases. The **danger from AIDS** comes from the opportunistic infections that start when the immune system no longer functions effectively. In this way, AIDS is similar to the immune deficiency in children who have been born without immune system organs.

- AIDS is the result of exposure to a contagious virus, **the human immunodeficiency virus (HIV)**. So far, researchers have discovered two variants of the human immunodeficiency virus: HIV-1, which causes most AIDS cases in the United States; and HIV-2, which is responsible for most AIDS cases in Africa, although some HIV-2 cases have appeared in the United States. The progression from HIV infection to AIDS varies, and few people such as Magic Johnson who are HIV positive may remain free of AIDS symptoms for many years.

## Incidence and Mortality Rates for HIV/AIDS:

- AIDS appears to be a relatively new disease, first recognized in 1981 and identified in 1983. The disease originated in Africa in a virus that affects monkeys. Nobody knows how and when the virus came to infect humans. Both the number of new cases and the number of deaths from AIDS increased rapidly during the 1980s. HIV infection became one of the leading causes of death in the US.
- In the mid-1990s, death rates from AIDS declined sharply in the United States, but some other countries experience increasing rate of HIV infection and AIDS death. According to one estimate, AIDS is the deadliest plague in history. Almost 40 million people were infected by 2001; when those people die, HIV will surpass the number of people killed by the bubonic plague in the 14th century.
- In 1992, the Centers for Disease Control and Prevention revised its definition of HIV infection. The number of cases in 1992 appears to rise sharply, but this count includes a large backlog of people who in previous years would not have been classified as having AIDS. AIDS cases reported each year (incidence) began a steady decline after 1992.
- Mortality from AIDS has dropped even more. From 1996 to 1998, mortality rates for AIDS in the US dropped by 47%. Incidence and death rates continue to decline. One reason the number of deaths from AIDS has declined is that HIV-infected individuals now live longer. People diagnosed with AIDS in 1984 had an average survival time of 11 months whereas people diagnosed in 1995 lived an average of 46 additional months. This increased survival time is a result of more effective drug therapies, early detection, and lifestyle changes.



## The HIV and AIDS Epidemics:

- In the United States and Europe, HIV infection was first associated with gay men, but an analysis of people infected with HIV reveals at least four distinct epidemics of the infection.
  1. First epidemic occur through men who have sex with men, accounted for many pf the first U.S cases of AIDS, but on Arica and Asia, heterosexual sex is most common method of transmission. Male-male sexual contact is still the leading source of HIV infection in U.S. but this declined during 1990s.
  2. A second epidemic affects injection drug users, with the percent of these cases remaining the same.
  3. A third epidemic include transmission through heterosexual contact, and this number is increasing.
  4. A fourth epidemic occurs through transmission from women to their children during the birth process. This mode of transmission decreased sharply with the advent of antiretroviral medication for pregnant women who are HIV positive.
- In the United States and Europe HIV infection affects men much more than women. Women are vulnerable to HIV infection through two routes of transmission; Heterosexual contact, which account half of all cases in women and injection drug use, which accounts for more than40% of the cases.so these two methods of transmission are responsible for cases among women. Worldwide situation is different from U.S.; women account for 46% of cases and half of deaths.
- HIV and AIDS disproportionately affect minority ethnic groups in the United States, especially by the epidemics affecting heterosexuals and injection drug users. In 1996 African Americans are the largest segment of the U.S. population with HIV and by 1999, they accounted for 41% of HIV infections. European Americans accounted for 38% of the cases, Hispanic Americans 20%, and Asian Americans less than 1%.
- Age is also a factor in HIV infection. The birth process is one mode of transmission, so 1 % of AIDs cases are younger than 13 years old. Young adults are more likely to acquire an HIV infection than other age groups, largely due to their risky behaviors, lack of information about HIV, and lack of power to protect themselves from unsafe sex. People over age 50 are less likely to acquire an infection than younger adults, but when infected, they tend to develop AIDS more rapidly.

## Symptoms of HIV and AIDS:

- During the first phase of HIV infection, symptoms are not easily distinguishable from those of other diseases. Within a week or so of infection, people may (or may not) experience symptoms consisting of fever, sore throat, skin, rash, headache, and other mild symptoms. This phase lasts from 1 to 8 weeks.

- Followed typically by a period that may last as long as 10 years, during which infected people are asymptomatic or experience only minimal symptoms.
- During the third stage, patients typically have a cluster of symptoms including swollen lymph nodes, fever, fatigue, night sweats, loss of appetite, and loss of weight, persistent diarrhea and painful skin rash.
- During final stage, the patients CD4+ T-lymphocyte cell count falls to 200 or less per cubic millimeter of blood (healthy people have a CD4+ count of 1,000), the person has AIDS. As their immune system loses its defensive capacities, people with early symptomatic HIV disease become susceptible to various opportunistic infections involving the lung, gastrointestinal tract, nervous system, liver, bones, and brain. Symptoms include greater weight loss, fever, dry cough, purplish bump on skin, general fatigue and AIDS related dementia, at this point HIV becomes AIDS.

## The Transmission of HIV:

Although HIV is an infectious organism with a high fatality rate, the virus is not easily transmitted from person to person. The main routes of infection are from person to person during sex, from direct contact with blood or blood products, and from mother to child during pregnancy, birth, or breastfeeding. Concentrations of HIV are especially high in the semen and blood of infected people. Other body fluids do not contain such a high concentration of HIV, making contact with saliva, urine, or tears much less of a risk. Eating with the same utensils or plates or drinking from the same cup as someone who is infected does not transmit HIV, nor does touching or even kissing someone who is infected. Insect bites and even being bitten by someone who is infected do not spread the virus..

People most at risk for HIV infection are those affected by causes of the four epidemics:

**Male–Male Sexual Contact:** In the early years of AIDS, men who had sex with men made up the majority of AIDS cases. Among gay and bisexual men, unprotected anal intercourse is an especially risky behavior, particularly for the receptive partner. Anal intercourse can easily damage the delicate lining of the rectum, so the receptive person is at high risk if his partner is infected with HIV. The damaged rectum makes an excellent route for the virus to enter the body, and infected semen has a high concentration of HIV. Unprotected oral sex with an infected partner is also a risky practice because HIV can enter the body through any tiny cut or other lesion in the mouth.

Condom use became common among gay men, but many younger ones engage in unsafe sexual practices, especially after using alcohol or drugs. Unprotected sex has an attraction for some gays that can overcome knowledge of risk. Thus, risky sexual behaviors continue to put men who have sex with men in danger of HIV exposure.

**Injection Drug Use:** Another high-risk behavior is the sharing of unsterilized needles by injection drug users, a practice that allows the direct transmission of blood from one person to another. Injection drug use is the second most frequent source of HIV infection in the United States. Some injection drug users engage in this behavior in certain situations—for example, when intoxicated or when there is no immediate access to sterile drug equipment.

Transmission through injection drug use accounts for a greater percentage of infected African Americans and Hispanic Americans than European Americans. Also, a higher percentage of infected women than men are exposed to the virus through this route..

**Heterosexual Contact:** Heterosexual contact is the leading source of HIV infection in Africa but in the United States African Americans and Hispanic Americans are disproportionately represented among those infected through heterosexual contact, and women are in greater danger than men from heterosexual contact.

This gender asymmetry comes from ease of transmission during sexual intercourse: male-to-female transmission is 8 times more likely than female-to-male transmission.

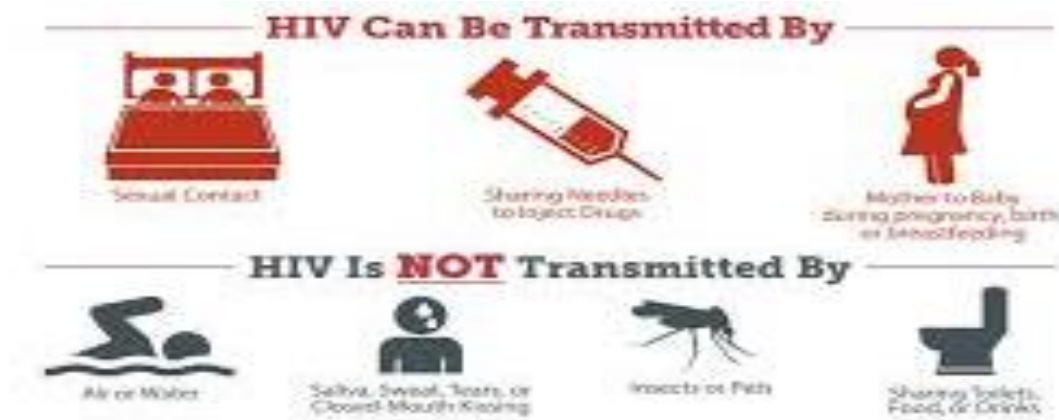
Trust and confidence in one's partner in a heterosexual relationship may be unfounded and result in HIV infection. People's overly trusting view of partners and failure to accept the possibility of risks lead to unprotected sex. Regular use of condoms may provide a high level of safety for heterosexual men and women, but many young heterosexual couples use condoms more as a means of preventing pregnancy than of preventing HIV.



**Transmission during the Birth Process:** Another group at risk for HIV infection is children born to HIV-positive women. This transmission tends to occur during the birth process and breastfeeding. Children infected with HIV during the birth process suffer a variety of developmental disabilities, including intellectual and academic impairment, psychomotor dysfunction, and emotional and behavioral difficulties.

Knowledge of HIV-positive status does not deter women from becoming pregnant. Between 15% to 30% of children born to HIV-positive women are infected, but this percentage can be cut to 8% or less if the pregnant women receives prenatal antiretroviral therapy. Therefore, seeking

prenatal care are critically important for HIV-positive women. Early prenatal care is responsible for much of the decline in this epidemic.



## Living with Alzheimer's disease:

Alzheimer's disease, a degenerative disease of the brain, is a major source of impairment among older people. In 1907, a German physician, Alois Alzheimer, reported on the relationship between autopsy findings of neurological abnormalities and psychiatric symptoms before death. Shortly after his report, other researchers began to call the disorder Alzheimer's disease.

**Diagnosis:** The disease can be diagnosed definitively only through **autopsy**, but Alzheimer's patients show **behavioral symptoms** of cognitive impairment and memory loss that may lead to a provisional diagnosis. During autopsy, a microscopic examination of the brain reveals "**plaques**" and tangles of nerve fibers in the cerebral cortex and hippocampus. These tangles of nerve fibers are the physical basis for Alzheimer's disease.

**Types:** Two different forms of the disease exist:

- **An early-onset** version that occurs before age 60. The early-onset type is quite rare, representing fewer than 5% of all Alzheimer's patients. Early-onset Alzheimer's may arise from a genetic defect, and at least three different genes on chromosomes 1, 14, and 21 contribute.
- **A late-onset** version that occurs after age 65. The late-onset type has symptoms similar to the early-onset type, may occur with or without a family history of disease. Risk for developing this version of the disease is related to apolipoprotein  $\epsilon$ , a protein involved in cholesterol metabolism. One form of apolipoprotein, the  $\epsilon 4$  form, may increase risk but the  $\epsilon 2$  form may actually offer some protection against Alzheimer's disease

**Risk factors for Alzheimer's disease**

- Age Factor (3% people between 65 to 74, 19% of people between 75 to 84, 47% of people over 85 show symptoms)
- Genetic factors
- Environmental factors
- Experiential factors  
For example, Type 2 diabetes, Mild brain trauma, repeated head injuries, Aluminum concentration in drinking water.
- Presence of amino acid homocysteine

All of these are the risk factors of having Alzheimer's disease.

#### Protective factors for Alzheimer's disease

- Low level of alcohol consumption
- Nonsteroidal anti-inflammatory drugs(NSAIDs)
- Taking folic acid
- Cognitive activity

Above these factors may decrease the risk of Alzheimer's disease.

#### Symptoms

Because the symptoms of Alzheimer's include a number of behavior problems that are also symptoms of psychiatric disorders, the disease can be difficult to diagnose.

- Memory loss
- Agitation and irritability,
- Suspiciousness and paranoia,
- Sleep disorders
- Incontinence, and sexual disorder
- Depression

These behavioral symptoms can be the source of much distress to patients as well as to their caregivers.

## Helping the Patient:

At present, Alzheimer's disease remains without a cure. Incurability and untreatability are two different things; the physical symptoms and other accompanying disorders of Alzheimer's disease are treatable, but not cured.

**Treatment approaches include:**



- Drugs for delaying the progression of cognitive deficits.
- Neuroleptic drugs for reducing agitation and aggression.
- Use of music and pets to relax Alzheimer's patients
- Family members can eliminate or reduce events that precede behavior problems.
- Modification of the environment can manage behavior problems of Alzheimer's patients. For example, for those who get lost in their own homes, labeling the doors can be helpful.



Although none of these treatments can cure Alzheimer's disease, most will help control undesirable behaviors and alleviate some of the distressing symptoms of the disease. Any treatment that can delay symptoms of Alzheimer's disease can make a significant difference in the number of cases and in the costs of management.

## Helping the Family

- As with other chronic illnesses, Alzheimer's disease affects not only patients but also family members, who bear the burden of caregiving. Some of the distressing symptoms can make caregiving difficult.
- The memory impairments are disturbing, because patients may fail to recognize their spouses and children.
- The Cognitive impairments lead to changes in personality, and affected one no longer seem like the same person.
- Families tend to find dangerous or embarrassing behavior especially distressing. This burden is emotional and practical. The problems of taking care of an Alzheimer's patient require time, demand new skills, and greatly disrupt family routine.
- In United States and around the world the caregiver role is occupied mostly by women and an unmarried women mostly become the primary caretaker for Alzheimer's patient.



- Caregivers experiencing the stress and strain of their role exhibit a number of symptoms of their own distress, including fatigue, frustration, helplessness, grief, shame, embarrassment, anger, depression.
- The chronic stress of caregiving makes these family members of interest to psychoneuroimmunologists, who study how chronic stress affects the immune system.
- Alzheimer's caregivers experience poorer physical and psychological health and poorer immunological function than people of similar age who are not caregivers.
- Also, the level of impairment of the Alzheimer's patient is directly related to the level of distress in the caregiver that is, the more impaired the patient, the more distressed the caregiver.
- Caregiver distress does not decrease when their caregiving ends. Thus, caregiving imposes severe burdens, extending even after the death of the Alzheimer's patient.
- Alzheimer's caregivers frequently experience feelings of loss for the relationship that they once shared with the patient; these feelings of loss may begin with a partner's diagnosis.
- Cognitive behavioral therapies can help caregivers manage their negative emotions.
- Many support groups exist to provide information and emotional support for caregivers, to develop the skills they will need to be effective caregivers for someone with Alzheimer's disease.

